



# NOAA

**SCIENCE. SERVICE. STEWARDSHIP.**



**FY 2015 BUDGET SUMMARY**

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**Layout and Design:** Marc Pulliam

# From the Desk of Dr. Sullivan



Dr. Kathryn D. Sullivan, Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator

Dear friends of NOAA,

NOAA is one of the most valuable service agencies in the U.S. government. We make earth system science matter for millions of Americans every day. Through our network of observations, forecasts, and assessments, we strive to provide the foresight and information people need to live well and safely on this dynamic planet. At NOAA, we call this information “environmental intelligence,” and producing it is at the core of our mission.

The intelligence and the services NOAA provides are in higher demand today than ever before. Increases in the frequency and severity of extreme weather events mean that NOAA must forecast and respond to these events with skill and accuracy. But the increased demand for our services goes beyond just extreme weather. Our marine transportation system must be more efficient to accommodate growing volume of commerce at our ports. NOAA provides the positioning data, tide and currents information, and nautical charts that ensure safe navigation and keep commerce flowing. Our marine ecosystems are changing due to climate and other stressors, thereby increasing the need for more scientific assessments to sustain and promote economically viable commercial and recreational fisheries, and ensure that threatened and endangered species are protected.

NOAA’s FY 2015 budget request of approximately \$5.5 billion aims not only to enhance public safety and community resiliency, but also to make smart investments via innovative science and research to better position NOAA for the future. This budget request continues efforts to strike the right balance between our oceanic and atmospheric missions, our internal and extramural programs, and our long-range and short-term research investments, while maintaining strong fiscal discipline. In the FY 2015 budget, we focus our investments in three areas: infrastructure, innovation, and services.

## **Investing in Mission-Critical Infrastructure**

This budget makes investments in infrastructure improvements that are critical to effectively execute NOAA’s diverse mission portfolio. NOAA is the only federal agency with the operational responsibility to provide critical and accurate weather, water, ocean, climate, and ecosystem forecasts. Our global observing systems are the foundation of the information and data we provide – without them we are essentially “flying blind” and the level of uncertainty in our forecasts increases at a time when people are demanding more precision. Investments are necessary today to ensure NOAA’s fleet of research vessels and observational platforms can continue to provide the environmental intelligence needed to meet our mission and are capable of gathering data in extreme environments, such as the Arctic. Specifically, this budget requests investments to launch new polar and geostationary satellites on time, build a new ocean class research vessel, ensure essential IT and physical infrastructure to support the Weather-Ready Nation initiative, and support atmospheric and coastal monitoring activities.

## **Strengthening Scientific and Programmatic Innovation**

NOAA is a service agency—but one that is supported by some of the best science in the world. This budget continues to invest in the research and development needed today for the innovations of tomorrow. Developing the latest technological advancements and promoting a fundamental understanding of our planet will keep our products and services viable, improve cost efficiency and management effectiveness, maximize economic

opportunity, and leverage our partnerships with external stakeholders. From making advancements in sustainable fisheries management to evolving NOAA's National Weather Service, this budget includes key investments to strengthen, support, and foster innovation within the organization. This includes work to advance electronic monitoring and next generation stock assessments; continue to improve our weather products and services; and, invest in a range of research and development activities that will support the goals of the President's Climate Action Plan.

### **Providing Services to Enhance Community Resilience**

In 2013, the United States experienced seven weather- and climate-related disaster events with losses exceeding \$1 billion apiece. Each of these events caused widespread damage and devastated families, businesses and communities. The question of our times isn't "if" the next big event is going to hit, but "when" it will hit, and how hard a blow it will deliver to our society and our economy. NOAA's environmental intelligence plays a vital role to ensure efficient and safe air and ocean transportation. Recognizing this, this budget invests in the services and information that promote community and economic resilience in advance and in the aftermath of these kinds of severe events.

The FY 2015 budget makes critical investments in: expanding coastal inundation tools to enable better flood warnings, supporting other activities that improve communities' ability to respond to extreme events, improving ecological forecasting, and understanding the potential environmental impacts of growing commerce in the Arctic.

### **Achieving Organizational Excellence**

Demand for NOAA's environmental intelligence and services is rising at the same time that the mix of services needed is evolving and budget pressures are increasing. These competing tensions place a premium on achieving organizational excellence: attracting and retaining the best talent; being brilliant at the basics of execution; operating with both high efficiency and optimal effectiveness. The FY 2015 budget proposes targeted investments that are needed to drive improved results in sustaining and developing our workforce's skills and provides much-needed capacity in our grants, finance, and workforce management departments.

NOAA is fortunate to have a highly-skilled and passionate workforce. Our people come to work each day committed to serving the public and advancing our mission. Our work touches every community across the United States, and we aim to perform at the highest level and with discipline and consistency. Every one of our investments in the fiscal year 2015 budget – from improving products and services to positioning ourselves for the future – will help the organization as a whole strive for excellence and deliver the environmental intelligence our country has come to rely upon.



Dr. Kathryn Sullivan

Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator

# Terminology

The reader should be aware of the specific meaning of several terms that are used throughout this budget summary:

## **FY 2013 Spend Plan**

Fiscal Year (FY) 2013 Appropriations (P.L. 113-6), including final spending allocations agreed to by the Congress.

## **FY 2014 Enacted**

Fiscal Year (FY) 2014 Consolidated Appropriations Act (2014 P.L. 113-76).

## **Inflationary Adjustments / Adjustments-to-Base (ATB)**

Includes the estimated FY 2015 federal civilian pay raise of 1.0 percent (and the estimated FY 2015 federal military pay raise of 1.0 percent as appropriate). Program totals will provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from GSA. NOAA will have to cover a portion of these costs through its program funding.

In addition, ATBs include unique/technical adjustments to the base program, for example transfers of base resources between budget lines.

## **FY 2015 Base**

FY 2014 Enacted plus Adjustments-to-Base.

## **Program Change**

Requested increase or decrease over the FY 2015 base.

## **FY 2015 Request**

FY 2015 base plus Program Changes.



Chapter 1  
Introduction





The National Oceanic and Atmospheric Administration's (NOAA) Fiscal Year (FY) 2015 budget request continues to restore balance between oceanic and atmospheric missions while maintaining and growing critical external partnerships in the pursuit of cutting edge research and environmental stewardship. For FY 2015, NOAA proposes a budget of \$5,496.7 million, an increase of \$174.1 million, or 3.2 percent above the FY 2014 Enacted. Our submission makes critical investments in infrastructure, services that enhance public safety and community resiliency, and in innovations that will position NOAA for the future and promote operational excellence. For more information about specific FY 2015 investments, please refer to individual line office chapters or the tables in Appendix 3.

We appreciate Congress' support in FY 2013 and FY 2014 and will continue to monitor major milestones and accomplishments related to our activities and programs in the current and future budget execution years. Below we highlight some of our top accomplishments from 2013, many of which we could not have achieved without our partners in the research, industry, and conservation communities:

**Rebuilt Four Fish Stocks While Increasing Fishing Opportunity:** NOAA, in cooperation with commercial and recreational fishermen and fishery management councils, rebuilt the following fisheries in 2013: Southern tanner crab fishery in the Bering Sea, pink shrimp in the South Atlantic, Sacramento River fall Chinook salmon, and South Atlantic black sea bass. In 2013, NOAA reported that 2012 U.S. commercial and recreational landings were the second-highest on record, totaling 9.6 billion pounds and valued at \$5.1 billion.<sup>1</sup>

**Completed Dual-Polarization Upgrade to Weather Radar Network:** In April 2013, NOAA completed deployment of the Dual Polarization (Dual Pol) capability across the Nation's Next Generation Weather Radar (NEXRAD) network of 158 sites. Dual Pol enables more accurate precipitation estimates, improved hail detection, improved rain and snow discrimination, and better detection of tornado debris. This innovation helped increase National Average Flash Flood Warn-



In 2013, the eastern distinct population segment of Steller sea lions was removed from the list of threatened and endangered species under the Endangered Species Act (ESA).

ing lead-time from 58 to 64 minutes, allowing people in affected areas more time to take life- and property-saving actions.

**Recovered Eastern Steller Sea Lions under the Endangered Species Act:** In 2013, NOAA announced recovery of the eastern distinct population segment of Steller sea lions, listed as threatened under the Endangered Species Act (ESA) almost a quarter century ago. NOAA's recovery actions included prohibiting shooting at or within specified distances of Steller sea lions, heightening public awareness, and conserving its habitat. The de-listing of this population, depleted mainly due to hunting, predator-control programs, and indiscriminate killing, demonstrates that species can recover with ESA protections.

**Provided Life-saving Forecasts in Advance of May 2013 Tornado Outbreak:** NOAA provided critical and timely data during an unprecedented extended episode of tornadoes, severe storms, and flooding that impacted the metropolitan area of Oklahoma City, OK, in late May 2013. NOAA meteorologists analyzed high resolution computer models and provided six-day advance warnings to hundreds of emergency managers and public safety officials. NOAA also issued 55 tornado warnings and hundreds of statements and social media posts for this area, with a tornado accuracy rate of 87 percent, false alarm rate of 54 percent, and average warning lead time of nearly 21 minutes.

<sup>1</sup> *Fisheries of the United States*, 2012. NMFS Office of Science and Technology. See here: [http://www.st.nmfs.noaa.gov/Assets/commercial/fus/fus12/FUS\\_2012\\_factsheet.pdf](http://www.st.nmfs.noaa.gov/Assets/commercial/fus/fus12/FUS_2012_factsheet.pdf).



Top: Staff from NWS WFO Norman, Oklahoma and the Storm Prediction Center met with President Barack Obama when he visited tornado ravaged Oklahoma on May 26, 2013. The President praised the forecasters for their exceptional services leading up to the May 20 tornado. Pictured (left to right) Rick Smith, Warning Coordination Meteorologist, WFO Norman; President Barack Obama; David Andra, Meteorologist in Charge, WFO Norman; Dr. Russell Schneider, Director, Storm Prediction Center. (Credit: The Oklahoman) Bottom: Tornado damage from the Washington, IL tornado on November 17, 2013.

**Supported Hurricane Sandy Recovery:** NOAA's WP-3D Orion and Gulfstream IV-SP aircraft conducted 24 flights to survey coastal damage wrought by Hurricane Sandy. The imagery was used to locate marine debris, clear entrances to New York and New Jersey seaports, clean up HAZMAT spills in Sandy Hook, NJ, and facilitate beach/dune repairs along Atlantic City and Seaside Heights. NOAA ships *Thomas Jefferson* and *Ferdinand R. Hassler* surveyed harbor and shipping channels to ensure safe navigation.

**Advanced Understanding of Ocean Acidification Impacts along West Coast:** NOAA scientists completed their third biennial cruise along the continental west coast to study the extent of acidification in coastal waters and the resulting impacts on marine life. Preliminary results indicate that the upper 100 meters of the water column in this region have become more corrosive to the shells of marine organisms – as much as a six-fold increase relative to pre-industrial conditions – causing a decline in pteropods, an important food source for juvenile salmon, whales, and numerous other marine organisms. This also poses a risk to the west coast shellfish industry.

**Set U.S. Record for Restoring Access to Fish Habitat:** In July 2013, NOAA was one of the many local, state, federal, and tribal partners that collaborated on removal of the Veazie Dam on Maine's Penobscot River, named one of America's Most Endangered Rivers every year from 1989 to 1996. With removal of the Great Works Dam, and now the Veazie Dam, and installation of fish passage at other dams, access has been opened up to 1,000 miles of habitat for Atlantic salmon, Atlantic and shortnose sturgeon, river herring, and other species. No other dam removal project in the U.S. has opened access to that much habitat. The Penobscot restoration also created more than 180 jobs.

**Received 2013 Space Achievement Award:** The Space Foundation awarded NOAA the annual Space Achievement Award for its use of space-based systems in making life-saving predictions and issuing early warnings of severe weather conditions. Each year, the Space Foundation presents the prestigious award to an individual or organization for significant contributions in advancing the exploration, development, or use of space.



**Continued on Pace to Improve Weather Forecasts via New Satellite Systems:** Since its October 2011 launch, Suomi NPP instruments have provided invaluable data for weather forecasting and environmental observations. In addition, the Joint Polar Satellite System (JPSS)-1 and JPSS-2 missions continue to make steady progress. JPSS instruments and ground system represent a new generation of observations and processed data products that will dramatically increase the accuracy, timeliness, stability and volume of data needed for substantial improvement in weather forecast skill. JPSS-1 is projected to launch in 2017.

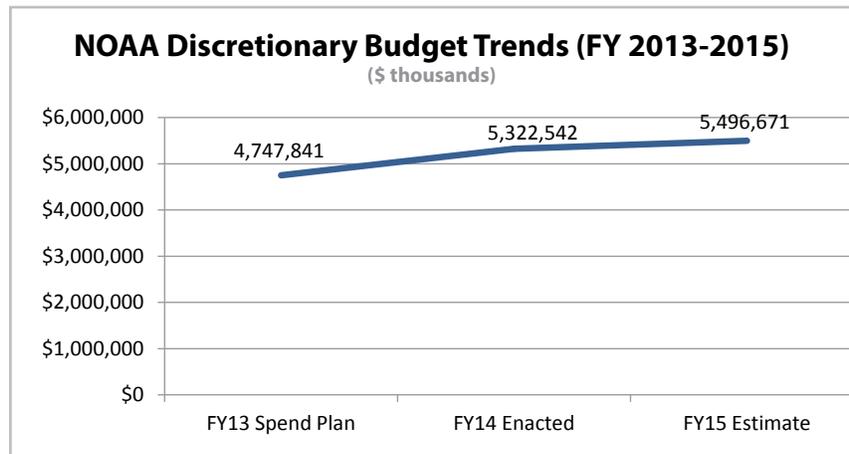
**Advanced Harmful Algal Bloom Detection:** NOAA scientists and partners improved field detection of algal species and toxins related to Harmful Algal Blooms (HABs). In Alaska, scientists and partners helped remote communities mitigate the dangers of paralytic shellfish poisoning, a HAB-related illness. In southern California and Maine, scientists researched and enhanced technology to detect harmful HAB-related toxins.

**Tracked Unprecedented Increase in Atmospheric CO<sub>2</sub>:** In May 2013, NOAA's Atmospheric Baseline Observatory (ABO) in Mauna Loa, Hawaii measured the daily mean concentration of carbon dioxide in the

atmosphere as surpassing 400 parts per million (ppm) for the first time since measurements began in 1958. Mauna Loa, one of six world class observing facilities staffed and monitored by NOAA scientists, is the oldest continuous carbon dioxide (CO<sub>2</sub>) measurement station in the world. ABO observatories are located across the globe; they collect and analyze atmospheric data that are fundamental to our understanding of Earth's changing climate and vital to environmental and national security interests.

**Enhanced Education Related to Marine Science:** In FY 2013, NOAA sponsored approximately 42,900 educators through professional development programs, supported over 550 post-secondary degrees in NOAA-related disciplines, and reached an estimated 66.9 million people through approximately 450 institutions that benefited from NOAA-funded interpretive/educational centers, exhibits, or programs.

**Opened New State of the Art Laboratory in La Jolla, CA:** NOAA officially opened its Southwest Fisheries Science Center Lab in La Jolla, CA on August 27, 2013. This lab has achieved LEED Gold certification and features a 528,344 gallon sea- and fresh-water Ocean Technology Development Tank, which will be a national resource for advancing marine science.



Note: FY 2013 Actuals do not include \$309 million from the Disaster Relief Appropriations Act. FY 2014 Enacted includes \$75 million in Fisheries Disaster Assistance Funding.

# Chapter 2

## National Ocean Service



The Tijuana River Estuarine Research Reserve is part of a network of 28 protected areas (NERRS) located in the United States and territories established for long-term research, education and stewardship. (Credit: Tijuana River Estuarine Research Reserve).



**N**OAA's National Ocean Service (NOS) is preparing for a future of higher intensity coastal storms, increased demands on the marine transportation system, changing sea levels leading to coastal flooding, and heightened offshore and coastal development. To prepare, NOS observes, measures, assesses, and manages the Nation's coastal, ocean and Great Lakes areas; protects marine and coastal areas; provides critical navigation products and services (e.g., real time observations, nautical charts); and prepares for and responds to natural disasters and emergencies. The benefits of NOS' products and services include increased recreation and tourism, resilient coastal communities, and enhanced ecosystem services.

**FY 2015 Request \$519,412,000**

NOAA requests a total of \$519,412,000 in mandatory and discretionary funds to support the continued and enhanced operations of the National Ocean Service (NOS). This total includes Operations, Research, and Facilities (ORF), Procurement, Acquisition, and Construction (PAC), and other accounts and is composed of a net increase of \$14,457,000 from the FY 2015 base. In FY 2015, NOS is making critical investments in products, services and capabilities that will improve the resilience of the Nation's coasts to immediate hazards and long term risks, all of which are linked through complex relationships among geophysical features, ecosystems, and human activity.

**FY 2015 ORF Budget Summary**

NOAA requests a total of \$492,514,000 to support the Operations, Research, and Facilities of the NOS. This includes a net increase of \$14,457,000 from the FY 2015 base.

**NOS – ORF Program Change Highlights for FY 2015:** Program changes above \$500,000 are highlighted below. A summary of funding by Program, Project, and Activity (PPA) is located in Appendix 3. Detailed descriptions of all program changes by PPA are located in the NOAA FY 2015 Congressional Justification.

**Navigation, Observations & Positioning \$192,376,000**

NOAA requests an increase of \$1,000,000 for a total of \$192,376,000 under the Navigation, Observations and Positioning sub-program. Highlights include:

**Navigation, Observations and Positioning: Shore-line TopoBathy LIDAR Data:** NOAA requests an in-

crease of \$4,000,000 to build upon its coastal LIDAR survey efforts. Working with interagency partners, NOAA will expand the national dataset to enhance navigation safety, coastal storm preparedness, and stewardship of ecological resources.

**Navigation, Observations and Positioning: Regional Geospatial Modeling Grants:** NOAA requests a decrease of \$4,000,000 to terminate the Regional Geospatial Modeling Grant program. NOAA will continue to support a range of regional geospatial requirements through height modernization, Continuously Operating Reference Stations (CORS), data access, capacity building, and other programs.

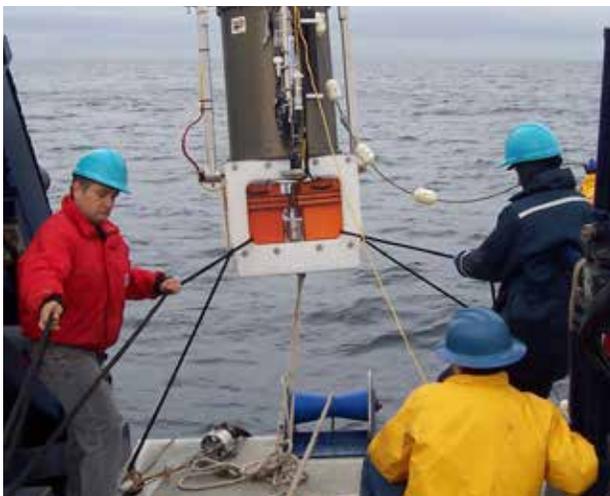
**Integrated Ocean Observing System (IOOS) Regional Observations: Marine Sensor Innovation:** NOAA requests an increase of \$1,000,000 to expand and accelerate the development and implementation of new marine sensor technologies. These new sensor technologies are critical to the Nation's understanding of coastal stressors, such as ocean acidification and ecological change.

**Coastal Science & Assessment \$88,003,000**

NOAA requests an increase of \$7,500,000 for a total of \$88,003,000 under the Coastal Science and Assessment sub-program. Highlights include:



NGS works with local counterparts to assist the Smithsonian Institution in the development of a pan-Caribbean Marine Global Earth Observation (Marine GEO) network at the Bocas del Toro Airport in Panama.



NOAA scientists and their partners deploy an Environmental Sample Processor to detect harmful algae and their toxins.

**Coastal Science, Assessment, Response, and Restoration: Ecological Forecasting:** NOAA requests an increase of \$4,000,000 to support ecological forecasting. With this increase, NOAA's National Centers for Coastal Ocean Science (NCCOS) will develop and operationalize ecological forecasts for harmful algal blooms (HABs), hypoxia, pathogens, and species distributions.

**Coastal Science, Assessment, Response, and Restoration: Arctic Spill Preparedness:** NOAA requests an increase of \$1,315,000 to improve oil spill response capacity in the Arctic. Among other activities, this investment will enable improvement of models to predict oil movement and weathering in ice-covered waters, identification of sensitive ecological resources, better coordination with and preparedness of local communities, and increased research to fill science gaps.

**Coastal Science, Assessment, Response, and Restoration: National Centers for Coastal Ocean Service (NCCOS):** NOAA requests to realign NCCOS intramural research activities. To strengthen NOAA's coastal science in the long run, NOAA proposes to reduce its physical footprint and fixed costs by closing the Beaufort, N.C. laboratory and consolidating the Charleston, S.C. lab with the Hollings Marine Lab, which is also located in Charleston. NOAA will continue its collaborative scientific initiatives with the National Institute of Standards and Technology (NIST) and state partners.

**Coastal Science, Assessment, Response, and Restoration: Scientific Support and Emergency Preparedness:** NOAA requests a decrease of \$3,815,000 to reflect the conclusion of research and monitoring

projects aimed at fulfilling high priority science needs and preparedness activities in its Gulf of Mexico Disaster Response Center. NOAA will continue to maintain NCCOS operational funding and provide critical science support for response and restoration in the Gulf region.

**Competitive Research:** NOAA requests an increase of \$6,000,000 to expand competitive research grants that address coastal ocean issues including harmful algal blooms, hypoxia, and coastal ecosystem assessment.

Ocean & Coastal Management and Services \$212,135,000

NOAA requests an increase of \$8,000,000 for a total of \$212,135,000 under the Ocean & Coastal Management and Services sub-program. Highlights include:

**Coastal Zone Management & Services: Capacity to Respond to Extreme Events:** NOAA requests an increase of \$5,000,000 to build capacity for response and resilience to extreme events. NOAA will provide products and services that help coastal communities prepare for, respond to, and recover more quickly from natural disasters, such as floods, hurricanes, and other inundation events. Proposed activities include improvements to inundation monitoring and modeling, social science and risk communication, tools and decision support, place-based monitoring, and planning and training for resilient coastal development.

**Coastal Management Grants: Regional Coastal Resilience Grants:** NOAA requests an increase of \$5,000,000 to establish a competitive grant program designed to address risks of weather events, climate hazards, and changing ocean conditions to regions,



The drilling ship Kulluk, aground near Kodiak, Alaska in January 2013. (Credit: U.S. Coast Guard)



communities, and existing and emerging sectors. More specifically, this competitive grant program is designed to promote resilience and address shared risks of weather events and climate hazards on coastal communities and economies. NOAA will prioritize actions that bring together partners on a regional scale and will fill a gap in the current state-centric structure of the Coastal Zone Management Grants.

**Sanctuaries and Marine Protected Areas:** NOAA requests a decrease of \$2,000,000 to sanctuary operations, including reductions to scalable activities such as the level of charter vessel use and supplies, among other non-essential operations and activities. At this level, NOAA will continue to fund mission critical functions and support continued implementation of management plans across the National Marine Sanctuary System.

### FY 2015 PAC Budget Summary

NOAA requests a total of \$3,700,000 to support Procurement, Acquisition, and Construction (PAC) activities of the National Ocean Service, which represents no program changes for NOS PAC.

### Mandatory Funds

#### Damage Assessment & Restoration Revolving Fund

The Damage Assessment and Restoration Revolving Fund (DARRF) was established in 1990 under Section

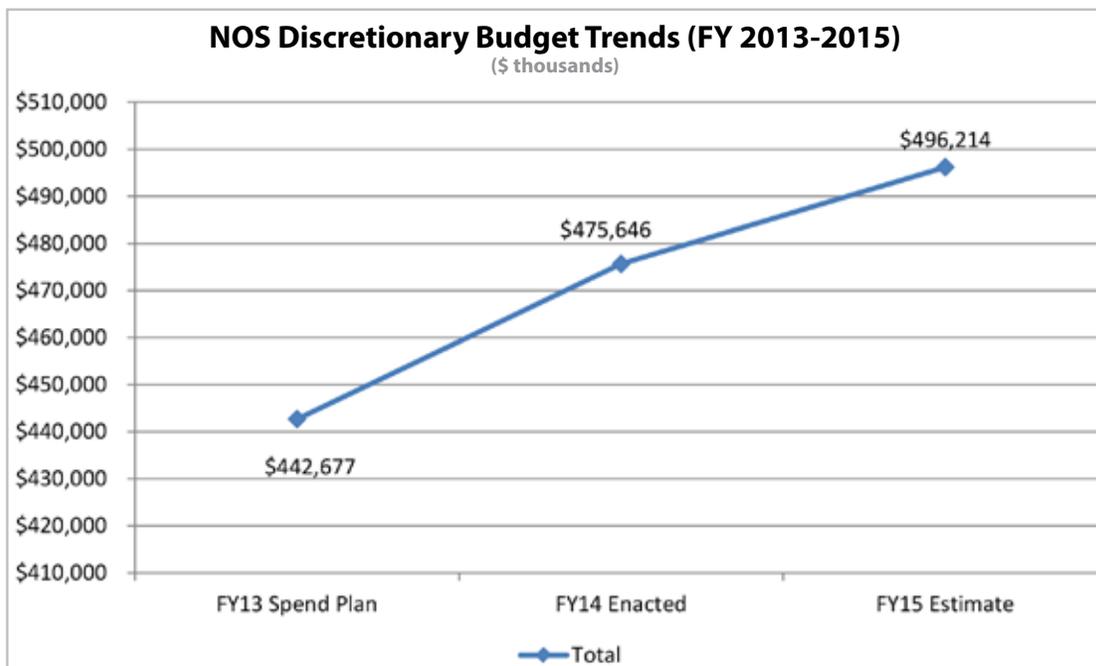
1012(a) of the Oil Pollution Act to facilitate (1) natural resources damage assessments, and (2) restoration, replacement, or acquisition of injured or lost natural resources, including resources of National Marine Sanctuaries and National Estuarine Research Reserves, tidal wetlands, and other habitats for which NOAA is trustee. The Fund receives proceeds from claims against responsible parties, as determined through court settlements or agreements.

#### Sanctuaries Enforcement Asset Forfeiture Fund

The Sanctuaries Enforcement Asset Forfeiture Fund receives proceeds from civil penalties and forfeiture claims against responsible parties, as determined through court settlements or agreements, for violations of NOAA sanctuary regulations. Penalties received are spent on resource protection within a sanctuary in which the violation occurred.

#### Gulf Coast Ecosystem Restoration Science, Observation, Monitoring and Technology Fund

The Gulf Coast Ecosystem Restoration Science, Observation, Monitoring, and Technology Fund provides funding for the NOAA RESTORE Act. The purpose of this program is to initiate and sustain an integrative, holistic understanding of the Gulf of Mexico ecosystem and support restoration efforts and the long-term sustainability of the ecosystem.



## Chapter 3

# National Marine Fisheries Service



Pacific coral reef.



**N**OAA's National Marine Fisheries Service (NMFS) serves the Nation through a science-based approach to the conservation and management of living marine resources and the promotion of sustainable commercial fisheries and healthy coastal and marine ecosystems. NMFS manages 478 fish stocks within the U.S. Exclusive Economic Zone (EEZ) as well as invertebrates, sea turtles, marine mammals, and other marine and coastal species, and their habitats.

FY 2015 Request \$916,751,000

NOAA requests a total of \$916,751,000 in mandatory and discretionary funds to support the continued and enhanced operations of NMFS. This total includes Operations, Research, and Facilities (ORF) and other accounts, including the Pacific Coastal Salmon Recovery Fund, and is composed of a net decrease of \$79,533,000 from the FY 2015 base.

## FY 2015 ORF Budget Summary

NOAA requests a total of \$836,825,000 to support the Operations, Research, and Facilities of NMFS, composed of a net increase of \$10,467,000 from the FY 2015 base.

**NMFS – ORF Program Change Highlights for FY 2015:** Program changes above \$500,000 are highlighted below. A summary of funding by Program, Project, and Activity (PPA) is located in Appendix 3. Detailed descriptions of all program changes by PPA are located in the NOAA FY 2015 Congressional Justification.

Protected Species Research and Management  
\$186,211,000

NOAA requests a net increase of \$6,500,000 in the Protected Species Research and Management sub-program for a total of \$186,211,000.

**Species Recovery Grants:** NOAA requests an increase of \$5,000,000 for the Species Recovery Grants Program. Additional grants will increase the capacity of states and tribes to conduct recovery actions for species listed under the Endangered Species Act (ESA). Actions may include assessing and monitoring species status and trends, minimizing bycatch of listed species, conserving habitat, and educating and engaging the public in conservation.

**Marine Mammals:** NOAA requests a decrease of \$2,500,000 for the John H. Prescott Marine Mammal

Rescue Assistance Grant Program and the Marine Mammal Protection Program. NOAA will continue to award competitive grants to stranding network organizations for the rescue, rehabilitation, or investigation of sick, injured, or distressed live marine mammals and for determining the cause of death or disease in dead marine mammals. NOAA will continue to coordinate technical and veterinary assistance and guidance to the stranding network.

**Marine Turtles:** NOAA requests a decrease of \$1,000,000 to reduce additional funds provided by the FY 2014 Consolidated Appropriations Act for recovery and protection activities related to Hawaiian sea turtles. In FY 2015, NMFS will continue to carry out recovery activities such as interagency consultation, technical assistance on bycatch reduction strategies, and cooperative conservation actions for marine turtles.

**Other Protected Species (Marine Fish, Plants, and Invertebrates): ESA Recovery:** NOAA requests an increase of \$4,000,000 for ESA Recovery. These funds will allow NMFS to implement ESA requirements for up to 66 coral species that NOAA is currently considering for listing. NMFS will use these funds to ensure that federal and non-federal actions that may affect listed species do not jeopardize their existence.



Atlantic Salmon.



Digital video provides improved clarity and greater detail for species identification in this Pacific halibut longline fishery. (Credit: Archipelago Marine Research, Ltd.)

**Atlantic Salmon:** NOAA requests an increase of \$1,000,000 for Atlantic Salmon recovery. Funds will enhance support for a number of activities related to the Maine Department of Marine Resources' research and management program, such as monitoring changes following dam removals and improving fish passage engineering.

**Fisheries Research and Management** \$437,398,000

NOAA requests a net increase of \$5,500,000 in the Fisheries Research and Management sub-program for a total of \$437,398,000.

**Fisheries Research and Management Programs: Electronic Monitoring and Reporting:** NOAA requests an increase of \$4,000,000 for Electronic Monitoring and Reporting. This increase will support the development and implementation of electronic monitoring and reporting technologies across the country. The goal is to deliver cost-effective and sustainable electronic data collection solutions that enhance monitoring of catch and bycatch in all U.S. fisheries.

**National Catch Share Program:** NOAA requests an increase of \$2,000,000 to develop and implement new catch share programs and put catch share efficiencies in place. The implementation of these systems will reduce the costs over time to NMFS and the fishing industry.

**Expand Annual Stock Assessments:** NOAA requests an increase of \$2,500,000 to increase the number of next generation stock assessments (NGSA). The NGSA framework incorporates ecosystem factors affecting key fish stocks (e.g., climate, habitat) and uses advanced technologies wherever possible to better inform fishery management. This funding will allow NOAA to strengthen its stock assessment capacity in each region.

**Salmon Management Activities:** NOAA requests a decrease of \$3,000,000 to reduce the pace of Mitchell Act hatchery program reforms currently underway. At the requested level, NMFS will continue to meet its obligations under the Mitchell Act by supporting the operations and maintenance of Columbia River hatcheries.

**Enforcement and Observers** \$109,328,000

NOAA requests a total of \$109,328,000 in the Enforcement and Observers sub-program. There are no program changes in this sub-program.

**Habitat Conservation and Restoration** \$42,190,000

NOAA requests a total of \$42,190,000 in the Habitat Conservation and Restoration sub-program. There are no program changes in this sub-program.

**Other Activities Supporting Fisheries** \$61,698,000

NOAA requests an increase of \$848,000 in the Other Activities Supporting Fisheries sub-program for a total of \$61,698,000.

**Climate Regimes and Ecosystem Productivity: Distributed Biological Observatory (Arctic):** NOAA requests an increase of \$848,000 to increase observations in the Arctic region by implementing a distributed biological observatory to improve understanding of how climate and human-induced change are affecting subsistence cultures and the environment. This program will lead to improved management of Arctic coastal and ocean resources, including fishery resources with potentially high value.

## Discretionary Funds

### Fisherman's Contingency Fund

The Fishermen's Contingency Fund (FCF) allows NOAA to compensate U.S. commercial fishermen for damage or loss of fishing gear, vessels, or revenues caused by oil



In the Russian River, the first Habitat Focused Area under NOAA's Habitat Blueprint, NOAA is working with partners to recover ESA-listed salmon, improve frost and river forecasts, and protect local communities from flooding.

and gas-related obstructions in any area of the Outer Continental Shelf (OCS). The funds are derived from fees collected annually by the Secretary of the Interior.

#### **Foreign Fishing Observer Fund**

The Foreign Fishing Observer Fund (FFOF) is financed through fees collected from owners and operators of foreign fishing vessels fishing within the U.S. EEZ (such fishing requires a permit issued under the Magnuson-Stevens Act). The fund is used by NOAA to pay salaries, administrative costs, data editing and entry costs, and other costs incurred for these observers.

#### **Fisheries Finance Program Account**

The Fisheries Finance Program (FFP) is a national loan program that makes long-term fixed-rate financing available to U.S. citizens who otherwise qualify for financing or refinancing of the construction, reconstruction, reconditioning, or the purchasing of fishing vessels; shoreside processing, aquaculture, mariculture facilities; or individual fishing quotas (IFQ).

#### **Pacific Coastal Salmon Recovery Fund**

The Pacific Coastal Salmon Recovery Fund (PCSRF) was established by Congress in FY 2000 to protect, restore, and conserve Pacific salmonids and their habitats. NMFS provides competitive funding to states and tribes of the Pacific Coast region. Eligible applicants include the States of Washington, Oregon, California, Idaho, Nevada and Alaska and federally recognized tribes of the Columbia River and Pacific Coast (including Alaska). The FY 2015 President's Request includes \$50,000,000 for this account.

#### **Marine Mammal Unusual Mortality Event Fund**

An unusual mortality event (UME) is defined under the Marine Mammal Protection Act (MMPA) as "a stranding that is unexpected; involves a significant die-off of any marine mammal population; and demands immediate response." This fund supports efforts to examine carcasses and live stranded animals allowing understanding of threats and stressors and the ability to determine when a situation is "unusual."



A Distributed Biological Observatory (DBO) will improve NOAA's understanding of change in the Arctic and lead to improved management of Arctic coastal and ocean resources, including fishery resources with potential high value.

### Fisheries Disaster Assistance Fund

The Department of Commerce is authorized to provide disaster assistance under either sections 308(b) or 308(d) of the Interjurisdictional Fisheries Act or sections 312(a) or 315 of the Magnuson-Stevens Fishery Conservation and Management Act. Under both statutes, a request for a fishery disaster determination is generally made by the governor of a State or by a fishing community, although the Secretary of Commerce may also initiate a review. In FY 2015, NOAA requests a decrease of \$75,000,000 for one-time fisheries disaster funding received in the 2014 Consolidated Appropriations Act.

## MANDATORY FUNDS

### Promote and Develop American Fishery Products & Research Pertaining to American Fisheries Fund

The American Fisheries Promotion Act (AFPA) of 1980 amended the Saltonstall-Kennedy (S-K) Act to authorize a grants program for fisheries research and development projects to be carried out with S-K funds. S-K funds are derived from a transfer from the Department of Agricul-

ture to NOAA from duties on imported fisheries products. An amount equal to 30 percent of these duties is made available to NOAA and, subject to appropriation, is available to carry out the purposes of the AFPA.

### Fisheries Enforcement Asset Forfeiture Fund

Section 311(e)(1) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) authorizes the Secretary of Commerce to pay certain enforcement-related expenses from fines, penalties and forfeiture proceeds received for violations of the MSA, Marine Mammal Protection Act, National Marine Sanctuaries Act, or any other marine resource law enforced by the Secretary. NOAA has established a Civil Monetary Penalty/Asset Forfeiture Fund (AFF).

### Fisheries Finance Program Account

The mandatory component of the Fisheries Finance Program Account (FFP) authority is subject to the Federal Credit Reform Act of 1990 (FCRA) (2 U.S.C. 661). The FCRA requires estimated loan costs to be appropriated in cash when Congress authorizes annual credit ceilings.

### Federal Ship Financing Fund

This account manages the loan guarantee portfolio that existed prior to the enactment of the Federal Credit Reform Act of 1990.

### Environmental Improvement And Restoration Fund

The Environmental Improvement and Restoration Fund (EIRF) was created by the Department of the Interior and Related Agencies Appropriations Act of 1998 for



NOAA Ship *Ferdinand R. Hassler* underway during a post-Hurricane Sandy survey of shipping lanes in the Norfolk, VA area.



the purpose of carrying out marine research activities in the North Pacific.

**Limited Access System Administration Fund**

Under the authority of the Magnuson-Stevens Act Section 304(d)(2)(A), NMFS must collect a fee to recover incremental costs of management, data collection, and enforcement of Limited Access Privilege (LAP) programs. Fees are deposited into the Limited Access System Administration Fund (LASAF). Fees shall not exceed three percent of the ex-vessel value of fish harvested under any such program.

**Western Pacific Sustainable Fisheries Fund**

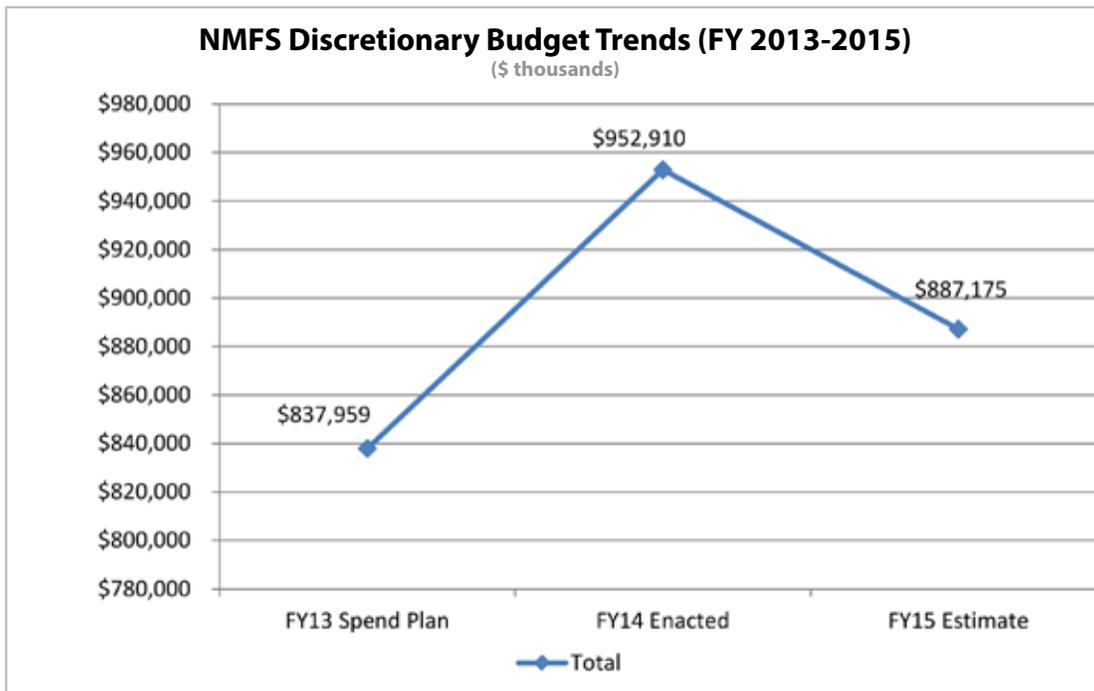
Section 204(e) of the 2006 amendments to the Magnuson-Stevens Fishery Conservation and Management Act authorizes the establishment of the Western Pacific Sustainable Fisheries Fund to allow foreign fishing within the U.S. EEZ in the Western Pacific through a Pacific Insular Area Fishery Agreement.

**North Pacific Observer Fund**

The restructured North Pacific Groundfish Observer Program (NPGOP) places all vessels and processors in the groundfish and halibut fisheries off Alaska into one



of two observer coverage categories: (1) a full coverage category, and (2) a partial coverage category. In the partial coverage category, landings from all vessels will be assessed a 1.25 percent fee on standard ex-vessel prices of the landed weight of groundfish and halibut. Money generated by this fee will pay for observer coverage in the partial coverage category in the following year.



Note: FY 2014 Enacted includes \$75 million in Fisheries Disaster Assistance Funding.

## Chapter 4

# Office of Oceanic and Atmospheric Research



South Pole staff release a high-altitude balloon, which carries ozone-measurement equipment up to 20 miles high in the atmosphere.



**N**OAA's Office of Oceanic and Atmospheric Research (OAR) is the central research line office that integrates research across the agency. OAR's science enables NOAA to fulfill its mission, both today and into the future. OAR supports laboratories and programs across the United States and collaborates with external partners, such as NOAA-funded Cooperative Institutes and thirty-two Sea Grant Institutions. OAR research contributes to accurate weather forecasts, enables communities to plan for and respond to climate events such as drought, and enhances the protection and management of the Nation's coastal and ocean resources.

FY 2015 Request \$462,173,000

In FY 2015, NOAA requests a total of \$462,173,000 to support the continued and enhanced operations of OAR, such as facilitating the provision of climate products and information to communities. This total includes Operations, Research, and Facilities (ORF) and Procurement, Acquisition, and Construction (PAC) accounts, and is composed of a net increase of \$31,793,000 from the FY 2015 base.

## FY 2015 ORF Budget Summary

NOAA requests a total of \$448,794,000 to support the Operations, Research, and Facilities of OAR, composed of a net increase of \$28,793,000 from the FY 2015 base.

**OAR – ORF Program Change Highlights for FY 2015:** Program changes above \$500,000 are highlighted below. A summary of funding by Program, Project, and Activity (PPA) is located in Appendix 3. Detailed descriptions of all program changes by PPA are located in the NOAA FY 2015 Congressional Justification.

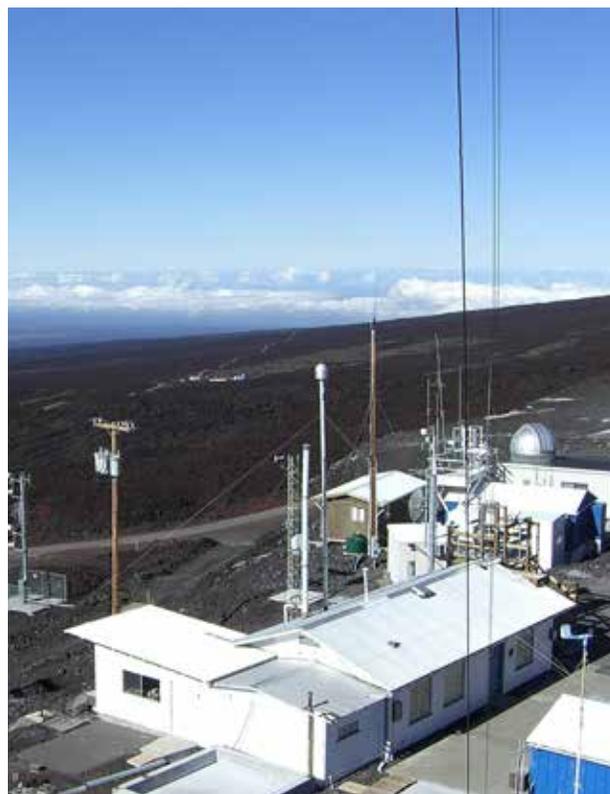
Climate Research \$188,270,000

NOAA requests an increase of \$30,500,000 in the Climate Research sub-program for a total of \$188,270,000.

**Laboratories and Cooperative Institutes: U.S. Global Change Research Program:** NOAA requests an increase of \$4,500,000 to implement research and other activities in support of the U.S. Global Change Research Program's priority research areas, including: carbon sources and sinks in North America; extreme climate and weather events such as heat waves, droughts and floods; and marine ecosystem "tipping points." Improved observations, understanding, and anticipation of the risks associated with these priority research areas are critical to advancing environmental and community resilience in a changing climate.

**Laboratories and Cooperative Institutes: Greenhouse Gas Monitoring in support of the President's Climate Action Plan:** NOAA requests an increase of \$8,000,000 to complete and sustain an observation and analysis system to determine uptake and emissions of greenhouse gases across North America. NOAA will build upon its Atmospheric Baseline Observatories, Global Reference Networks for atmospheric composition, and North American Carbon Observation and Analysis System (NACOAS) to deliver information on the full suite of greenhouse gas emissions (e.g., carbon dioxide, methane, nitrous oxide).

**Laboratories and Cooperative Institutes: Atmospheric Baseline Observatories:** NOAA requests an increase of \$3,000,000 to continue long-term data records collected at Atmospheric Baseline Observatories, which document trends and distributions of atmospheric constituents influencing global climate, ozone depletion, and changes in baseline air quality. With this program increase, NOAA will continue full operations at all six observatories, which are at risk due to the combination of rising costs at remote sites and a decline in funding from the National Science Foundation.



Mornings at the Mauna Loa Atmospheric Baseline Observatory are usually cloud free. The Keeling Building is at center. The dome at lower right houses the Dobson spectroradiometer that measures the ozone layer. (Credit: Forrest M. Mims III)

**Regional Climate Data and Information: National Integrated Drought Information System:** NOAA requests an increase of \$1,900,000 to support competitive research grants and contracts to develop the Regional Drought Early Warning System (RDEWS) and apply it to the Pacific Northwest, the Mid-west agricultural belt, the Southern Plains states (TX, NM, OK), and the Carolinas. In addition, this effort will build on existing activities in California to support RDEWS and provide information for drought planning across the state to develop a comprehensive state-wide system. This funding will also support research projects that address coping with drought across a range of sectors.

**Regional Climate Data and Information: Assessments:** NOAA requests an increase of \$3,970,000 to support climate assessments at national and regional scales in compliance with The Global Change Research Act of 1990. This Act requires the President (through a Federal interagency body) to prepare and submit to Congress regular climate assessments that examine the latest climate research, uncertainty, effects of global change, and emerging trends.

**Regional Climate Data and Information: Regional Integrated Sciences and Assessments (RISA):** NOAA requests an increase of \$4,640,000 to expand its regional research and information services. OAR will support external research and development of new information about the impacts of climate on communities, natural and managed resources, infrastructure, transportation, and health.

**Regional Climate Data and Information: NOAA Arctic Research Program:** NOAA requests an increase of \$2,190,000 to support further development of NOAA's Arctic Observing Network and informational products related to Arctic Ocean changes, sea-ice extent, ecosystem evolution, and Arctic to mid-latitude weather/climate linkages.

**Regional Climate Data and Information: Climate Resilience Toolkit in support of the President's Climate Action Plan via the Climate.gov Portal:** NOAA requests an increase of \$2,300,000 to continue supporting development of a Climate Resilience Toolkit and the NOAA Climate.gov Portal, which will facilitate public online access to NOAA's climate data, information, and services.

Weather & Air Chemistry Research \$84,894,000

NOAA requests an increase of \$3,000,000 in the Weather and Air Chemistry Research sub-program for a total of \$84,894,000.

**U.S. Weather Research Program: Enhancing Readiness Levels for Short- and Long-term Research:** NOAA requests an increase of \$3,000,000 to accelerate the transition of weather-related research projects to operational use. This will support improvements in forecasting events such as tornadoes and hurricanes, storm surge, inundation, and ice cover.

Ocean, Coastal, and Great Lakes Research \$163,527,000

NOAA requests a decrease of \$4,629,000 in the Ocean, Coastal, and Great Lakes Research sub-program for a total of \$163,527,000.

**Laboratories and Cooperative Institutes: Autonomous Underwater Vehicle (AUV) Demonstration:** NOAA requests a decrease of \$2,000,000 to reduce support for an AUV demonstration. NOAA will maintain its fleet of autonomous vehicles and other alternative technologies, and will continue to support a competitive process open to NOAA laboratories and Cooperative Institutes, but will reduce the funding available for ongoing development, test and evaluation activities.

**National Sea Grant College Program Base:** NOAA requests a decrease of \$1,000,000 to reduce the amount of research funding available for competitively awarded projects.

**National Sea Grant College Program Base: Grand Challenge:** NOAA requests a decrease of \$1,000,000 to terminate the Grand Challenge initiative, which was established in FY 2014 to foster scientific and technological innovation in ocean mapping and observing technologies.

**Marine Aquaculture Program:** NOAA requests a decrease of \$2,500,000 to reduce the national technology transfer and extension competition for Marine Aquaculture. NOAA will direct remaining funds externally to generate scientific information for industry development and provide technology transfer to support sustainable domestic aquaculture.

**Ocean Exploration and Research:** NOAA requests a decrease of \$7,000,000 to reduce mapping and exploration of unknown and poorly known ocean areas and phenomena. With this decrease, the Ocean Exploration Program will reduce the number of days for the Extended Continental Shelf (ECS) mapping effort and will decrease the number of missions for the *EV Nautilus* program and the *Okeanos Explorer*.

**Integrated Ocean Acidification:** NOAA requests an increase of \$8,871,000 to improve understanding of the

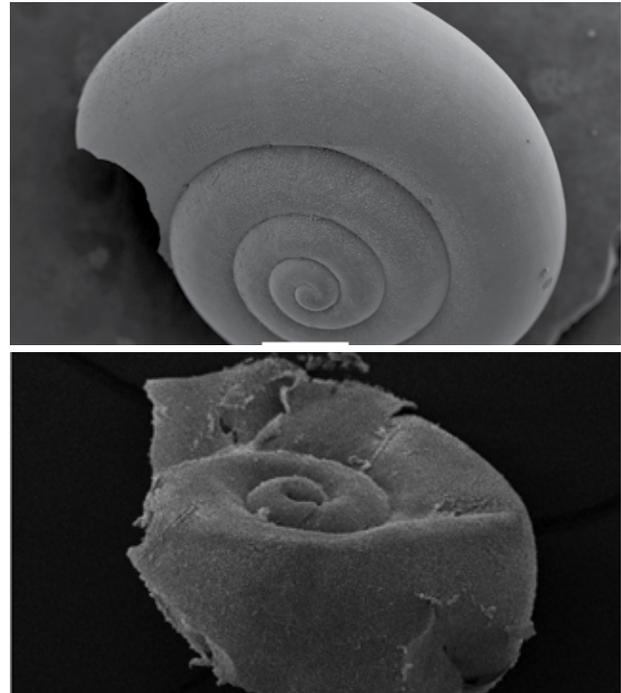


impacts of ocean and coastal acidification and to develop tools and adaptive strategies for affected industries and stakeholders. This increase will allow NOAA to develop advanced technologies, enhance the U.S. Ocean Acidification Observing System, develop models to better understand carbonate chemistry dynamics and impacts, and provide valuable data products for coastal resource managers and other stakeholders.

High Performance Computing (HPC) systems. This will allow NOAA to take advantage of next-generation research computing technologies and more efficiently use HPC assets.

**Innovative Research and Technology \$12,103,000**

NOAA requests a total of \$12,103,000 in the Innovative Research and Technology sub-program. There are no program changes in this sub-program.



### FY 2014 PAC Budget Summary

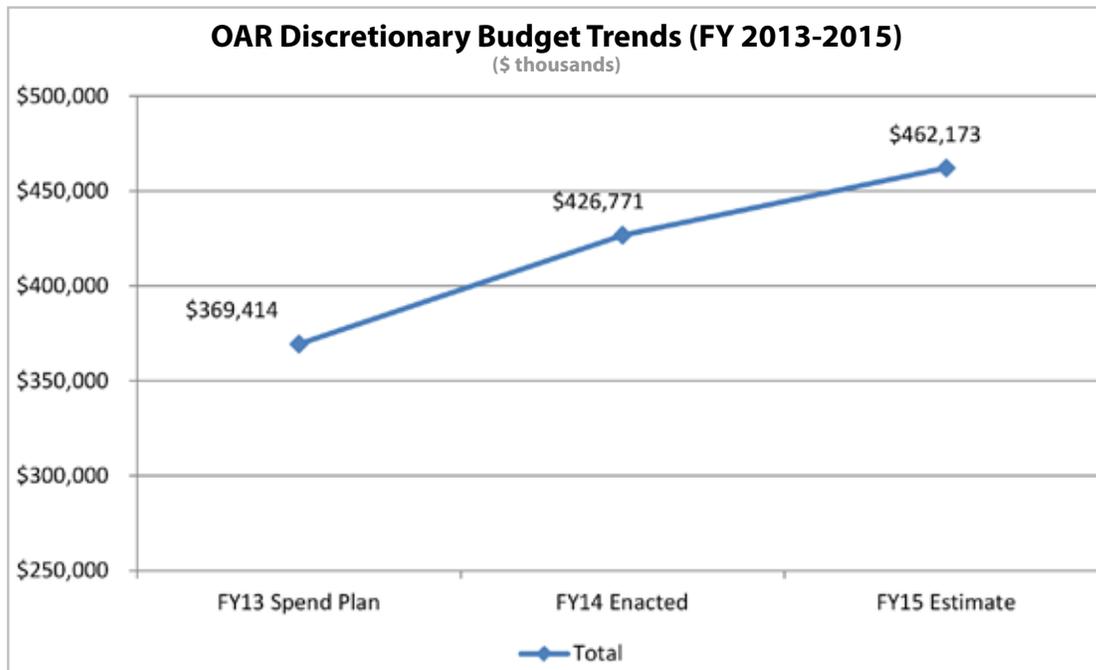
NOAA requests a total of \$13,379,000 to support Procurement, Acquisition, and Construction (PAC) activities of the Office of Oceanic and Atmospheric Research, composed of a net increase of \$3,000,000 from the FY 2015 base.

**Systems Acquisition \$13,379,000**

NOAA requests an increase of \$3,000,000 in the Systems Acquisition sub-program for a total of \$13,379,000.

**Research Supercomputing/CCRI: High Performance Computing Software Engineering:** NOAA requests an increase of \$3,000,000 to re-architect research applications to run efficiently on next-generation fine-grain

Intact pteropod shell (top) vs. partially dissolved pteropod shell (bottom) as a result of exposure to ocean acidification in the natural environment along the West Coast in the California Current Ecosystem. (Credit: Bednaršek, N. et al. (2013, submitted to Proceeding of Royal Society B))



# Chapter 5

## National Weather Service



The National Weather Service has made many improvements to the challenges of hurricane forecasting. Hurricanes can cause extensive damage to life, property, and ecosystems as seen from this view of Bolivar Peninsula, Texas after Hurricane Ike, 2008.



The National Weather Service (NWS) provides weather, water, and climate forecasts and warnings for the protection of life and property and enhancement of the national economy. NWS is the official and authoritative U.S. voice for issuing warnings during life-threatening weather situations. NWS forecasters issue public, aviation, marine, fire weather, climate, space weather, river and flood forecasts and warnings every day. Each year, NWS collects approximately 76 billion observations and issues approximately 1.5 million forecasts and 50,000 warnings. NWS data and products are publicly available through a national information database.

**FY 2015 REQUEST \$1,063,347,000**

In FY 2015, NOAA requests a total of \$1,063,347,000 to support NWS' advancements to weather, water, and climate products and services. This total includes Operations, Research, and Facilities (ORF) and the Procurement, Acquisition, and Construction (PAC) accounts and is composed of a net decrease of \$22,577,000 from the FY 2015 base.

In addition to a number of program-related changes, the NWS proposes to restructure its budget Programs, Projects, and Activities (PPA) in FY 2015 as part of a broader effort to evolve the NWS to deliver more efficient, responsive, and advanced operations to the Nation. This proposal, which will align the NWS budget to both function and performance, is critical to advancing the organization's Weather-Ready Nation goal. The proposed budget restructure, which will involve the full engagement of our stakeholder community, will improve budget alignment and transparency by strengthening internal controls and customer service, while enabling greater coordination and collaboration among activities that serve NWS' overall mission. See the following charts for a detailed crosswalk of the budget line restructure.

### Proposed NWS Budget Restructure (ORF)

CURRENT SUB-PROGRAM	CURRENT PPA	PROPOSED SUB-PROGRAM/PPA
Operations and Research	Local Warnings and Forecasts	Observations; Central Processing; Analyze, Forecast, & Support; Dissemination; Science & Technology Integration
Operations and Research	Air Quality Forecasting	Science & Technology Integration
Operations and Research	Alaska Data Buoys	Observations
Operations and Research	Sustain Cooperative Observer Network	Observations
Operations and Research	NOAA Profiler Network	Observations
Operations and Research	Strengthen U.S. Tsunami Warning Network	Observations; Analyze, Forecast, & Support
Operations and Research	Pacific Island Compact	Analyze, Forecast, & Support
Operations and Research	National Mesonet Network	Observations
Operations and Research	Advanced Hydrological Prediction Services	Central Processing
Operations and Research	Aviation Weather	Analyze, Forecast, & Support; Dissemination; Science & Technology Integration
Operations and Research	WFO Maintenance	Analyze, Forecast, & Support
Operations and Research	Weather Radio Transmitters Base	Dissemination
Operations and Research	Central Forecast Guidance	Central Processing; Analyze, Forecast, & Support; Dissemination; Science & Technology Integration
Systems Operation and Maintenance	NEXRAD	Observations
Systems Operation and Maintenance	ASOS	Observations
Systems Operation and Maintenance	AWIPS	Central Processing
Systems Operation and Maintenance	NWSTG Backup – CIP	Dissemination

## Proposed NWS Budget Restructure (PAC)

CURRENT SUB-PROGRAM	CURRENT PPA	PROPOSED PPA
Systems Acquisition	ASOS	Observations
Systems Acquisition	AWIPS	Central Processing
Systems Acquisition	NEXRAD	Observations
Systems Acquisition	NWSTG Legacy Replacement	Dissemination
Systems Acquisition	Radiosonde Network Replacement	Observations
Systems Acquisition	Weather and Climate Supercomputing	Central Processing
Systems Acquisition	Complete and Sustain NOAA Weather Radio	Dissemination
Systems Acquisition	Ground Readiness Project	Dissemination
Construction	WFO Construction	Facilities Construction & Major Repairs

### FY 2015 ORF Budget Summary

NOAA requests a total of \$926,853,000 to support the Operations, Research, and Facilities (ORF) activities of the NWS, composed of a net decrease of \$45,452,000 from the FY 2015 base.

**NWS – ORF Program Change Highlights for FY 2015:** Program changes above \$500,000 are highlighted below. A summary of funding by PPA is located in Appendix 3. Detailed descriptions of all program changes by PPA are located in the NOAA FY 2015 Congressional Justification.

Observations \$200,277,000

NOAA requests a decrease of \$6,500,000 in the Observations sub-program for a total of \$200,277,000.

**Observations: National Mesonet Program:** NOAA requests a decrease of \$6,500,000 from the additional funds provided to the National Mesonet Program in the Consolidated Appropriations Act, 2014. NOAA will continue to administer the National Mesonet Program, started in 2014.

Central Processing \$86,517,000

NOAA requests a decrease of \$14,000,000 in the Central Processing sub-program for a total of \$86,517,000.

**Central Processing: Establishment of Regional Enterprise Application Development and Integration (READI) Teams:** NOAA requests a decrease of \$10,000,000 to reflect efficiencies achieved by transi-

tioning to a new information technology (IT) service delivery model for forecast offices through remote software support. NWS proposes to continue IT support for the field in the form of READI teams located in each of the six NWS Regions.

**Central Processing: Advanced Hydrologic Prediction Services (AHPS):** NOAA requests a decrease of \$4,000,000 from the additional funds provided to the AHPS program in the Consolidated Appropriations Act, 2014. NWS will continue to collaborate with river commissions to ensure that critical data is incorporated into accurate and timely flood forecasts.

Analyze, Forecast, & Support \$476,360,000

NOAA requests a decrease of \$6,000,000 in the Analyze, Forecast, and Support sub-program for a total of \$476,360,000.

**Analyze, Forecast, and Support: National Tsunami Hazard Mitigation Program (NTHMP) Grants:** NOAA requests a decrease of \$6,000,000, which would eliminate grant funding to partners for education, outreach, and awareness programs through the NTHMP in FY 2015. NOAA is not seeking to terminate the program. NOAA is committed to maintaining its strong forecast and warning program and will continue administration of the TsunamiReady™ Program.

Dissemination \$40,099,000

NOAA requests a decrease of \$6,406,000 in the Dissemination sub-program for a total of \$40,099,000.



**Dissemination: NOAA’s Next Generation Air Transportation System (NextGen) Weather Program:**

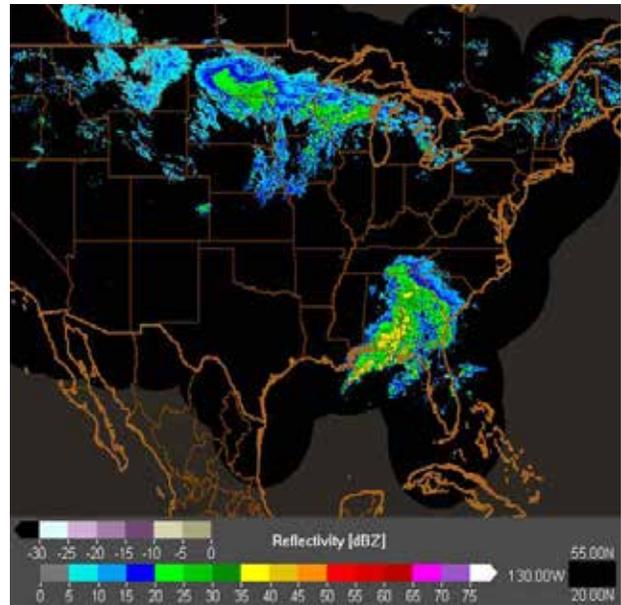
NOAA requests a decrease of \$9,000,000 to maintain continuity of support for the NextGen initiative, while allowing for a re-evaluation of program goals and scope with multi-Agency partners. The proposed decrease will permit the implementation of key IT infrastructure efforts to attain Initial Operational Capability (IOC), but will slow the pace of NextGen science and development work, and some dissemination efforts. Note: This decrease is split between two PPAs: a decrease of \$6,406,000 for Dissemination, and a decrease of \$2,594,000 for Science & Technology Integration.

Science & Technology Integration \$123,600,000

NOAA requests a decrease of \$3,776,000 in the Science and Technology Integration sub-program for a total of \$123,600,000.

**Science and Technology Integration: NOAA’s Next Generation Air Transportation System (NextGen) Weather Program:** Please see the description under Dissemination for program decrease details.

**Science and Technology Integration: Responding to Congressionally-Requested Studies of NWS:** NOAA requests an increase of \$3,000,000 to support responses to recommendations of two independent studies of the NWS – *Weather Services for the Nation: Becoming Second to None*, by the National Academy of Sciences (NAS) in 2012, and *Forecast for the Future: Assuring the Capacity of the National Weather Service* by the National Academy of Public Administration (NAPA) in May 2013. Both studies urge the NWS to become a better, more agile organization. The increase will support analyses of workforce and infrastructure, enhance capacity for testing and



High-resolution radar mosaic from NextGEN Multi-Radar Multi-Sensor (MRMS) used for air route planning and decision making. MRMS integrates radar, surface observations, satellite, and numerical weather prediction data and generates automated, seamless national 3D radar mosaics at high resolutions. These improvements will affect aviation, hydrological, and severe weather forecasting capabilities.

demonstration, improve integration of stakeholder advice, and promote better evaluation of progress.

**Science and Technology Integration: Centralized Water Forecasting Demonstration:** NOAA requests an increase of \$4,000,000 to develop and test a new centralized national hydrologic modeling and forecast system to be deployed at the National Water Center in Tuscaloosa, AL. Water is one of our Nation’s most valuable resources, driving economic and emergency management decisions. Current NWS hydrologic forecast mod-



The National Water Center will serve as the hub for developing and testing a new centralized hydrologic modeling and forecast system.



The NEXRAD dual-pol radar upgrade provides better information about the type of precipitation in the atmosphere and its intensity, size, and location.

els rely on decades-old science. A centralized approach is a cost-effective way to implement scientific advancements and achieve greater consistency in products.

**Science and Technology Integration: Hurricane Forecast Improvement Project (HFIP):** NOAA requests a decrease of \$8,182,000, which will delay advancements in hurricane forecast track and intensity accuracy by HFIP, an effort in which NOAA coordinates with other agencies and scientists to improve operational hurricane forecast guidance. HFIP has achieved many of its goals, to date.

## FY 2015 PAC Budget Summary

NOAA requests a total of \$136,494,000 to support Procurement, Acquisition, and Construction (PAC) activities of the NWS, composed of a net increase of \$22,875,000 from the FY 2015 base.

**NWS – PAC Program Change Highlights for FY 2015:** Program changes above \$500,000 are highlighted below. A summary of funding by PPA is located in Appendix 3. Detailed descriptions of all program changes by PPA are located in the NOAA FY 2015 Congressional Justification.

Systems Acquisition \$122,784,000

NOAA requests an increase of \$17,165,000 in the Systems Acquisition sub-program for a total of \$122,784,000.

**Observations: Termination of Automated Surface Observing System (ASOS) Product Improvement (PI):** NOAA requests a planned decrease of \$1,635,000 for the completion of the tri-agency ASOS PI program,

which has led to new technologies that have increased aviation safety and improved weather forecasting. The tri-agency ASOS Program Management Committee (Departments of Commerce, Defense and Transportation) agrees to this completion.

**Observations: Next Generation Weather Radar (NEXRAD) Service Life Extension Program:** NOAA requests an increase of \$9,300,000 to extend the useful life of the aging NEXRAD weather radar infrastructure that underpins severe weather forecast and warning services for high-impact events. A Service Life Extension Program is required to sustain current weather forecast and warning services until the next generation of weather radars is identified, developed, and deployed. Without this investment, NEXRAD availability is anticipated to degrade beginning in 2020, resulting in radar outages and gaps and negatively impacting tornado and flash flood warnings.

### Observations

(Budget Authority in Thousands)

FY 2015 REQUEST	\$13,314
FY 2016	\$20,234
FY 2017	\$29,269
FY 2018	\$26,967
FY 2019	\$16,923

**Central Processing: Slow Advanced Weather Interactive Processing System (AWIPS) Service Improvements:** NOAA requests a decrease of \$1,500,000 to slow development and implementation of tools and capabilities aimed at achieving the NWS Future Forecast Office operations. NWS Future Forecast Office operations will improve situational awareness during weather events by enabling forecasters to spend more time on Impact-Based Decision Support Services (IDSS).

### Central Processing

(Budget Authority in Thousands)

FY 2015 REQUEST	\$64,261
FY 2016	\$64,261
FY 2017	\$64,261
FY 2018	\$64,261
FY 2019	\$64,261

**Dissemination: Re-architected NWS Telecommunications Gateway (NWSTG):** NOAA requests a planned increase of \$5,000,000 to continue implementation of a



re-architected NWSTG and backup system. The NWSTG is the central communication hub that collects and distributes time-perishable weather products to and from thousands of customers worldwide. A re-architected NWSTG will accommodate future data volumes from increased satellites, model data, and observations.

**Dissemination: Ground Readiness Project (GRP):** NOAA requests an increase of \$6,000,000 to improve weather warnings and forecasts through greater utilization of satellite, radar, and model data, which is currently at a volume that exceeds the capacity of the NWS' IT infrastructure. NWS must upgrade its IT infrastructure to fully benefit from new observations and products.

Dissemination (Budget Authority in Thousands)	
FY 2015 REQUEST	\$45,209
FY 2016	\$35,195
FY 2017	\$24,188
FY 2018	\$24,188
FY 2019	\$24,188

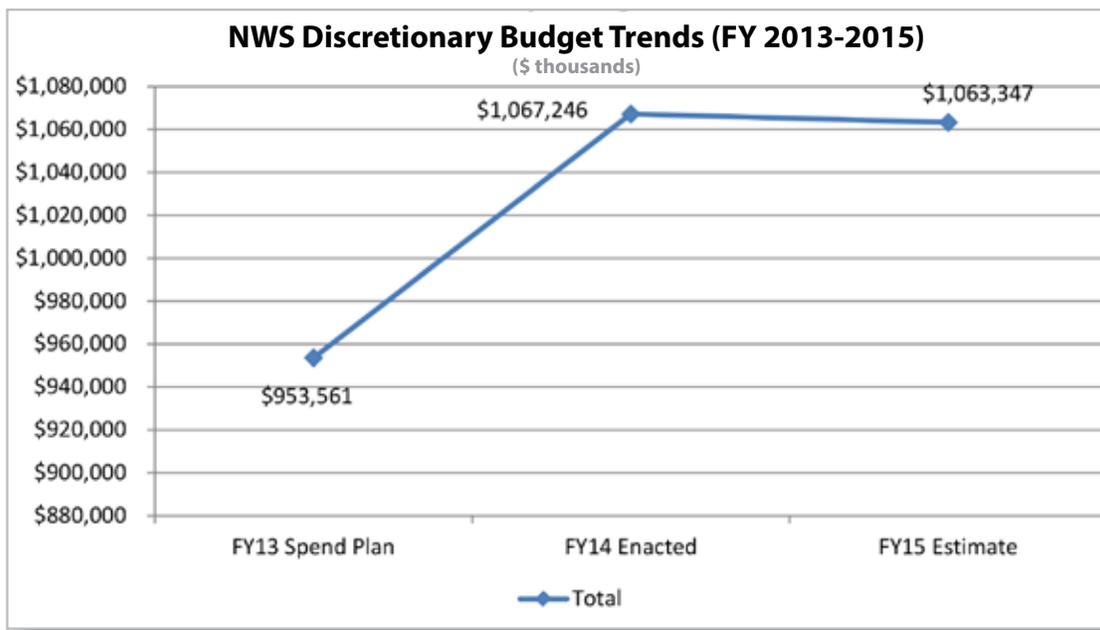
**NWS Construction \$13,710,000**

NOAA requests an increase of \$5,710,000 in the NWS Construction sub-program for a total of \$13,710,000.

**Facilities Construction & Major Repairs: Weather Forecast Office and River Forecast Center Relocations:** NOAA requests a decrease of \$2,350,000, which will slow investments in tenant improvements (TI) and moving costs associated with Weather Forecast Office (WFO) and River Forecast Center (RFC) relocations due to unacceptable conditions at leased facilities. Continued investment will be needed as NOAA completes a comprehensive review of NWS facility conditions (planned for FY 2016) to inform future facility plans.

**Facilities Construction & Major Repairs: Relocation of the National Logistics Supply Center/National Reconditioning Center (NLSC/NRC):** NOAA requests an increase of \$8,060,000 to relocate the NLSC/NRC from the Bannister Federal Complex in Kansas City, Missouri. General Services Administration plans to close this federally operated property. Key NWS observational infrastructure (e.g., NEXRAD) as well as FAA and DoD missions, depend on NRC/NLSC for stock items and repairs.

Facilities Construction & Major Repairs (Budget Authority in Thousands)	
FY 2015 REQUEST	\$13,710
FY 2016	\$3,159
FY 2017	\$3,159
FY 2018	\$3,159
FY 2019	\$3,159



## Chapter 6

# National Environmental Satellite, Data, and Information Service



Satellite antennae at the Fairbanks Alaska Satellite Operations Facility.



The National Environmental Satellite, Data, and Information Service (NESDIS) is dedicated to providing timely access to global environmental data from satellites and other sources to promote, protect, and enhance the Nation’s economy, security, environment and quality of life. Timely and accurate information from satellite observations supports the National Weather Service, federal and state agencies, and local emergency management agencies, enabling advance warnings of emerging severe weather such as hurricanes, flash floods, tsunamis, winter storms, and wildfires. NESDIS acquires and manages the Nation’s operational environmental satellites; operates the NOAA National Data Centers; provides data and information services, including Earth system monitoring; performs official assessments of the environment; and conducts related research.

**FY 2015 Request \$2,247,926,000**

NOAA requests a total of \$2,247,926,000 to support the continued and enhanced operations of NESDIS. This total includes Operations, Research, and Facilities (ORF) and Procurement, Acquisition, and Construction (PAC) accounts and is comprised of a net increase of \$161,909,000 in program changes from the FY 2015 base. The FY 2015 President’s Budget request for NESDIS supports continued development of NOAA’s next generation flagship satellites that support the nation’s weather enterprise.

In addition to a number of program-related changes, NESDIS proposes to reorganize its management structure and restructure its budget Programs, Projects, and Activities (PPA) in FY 2015 to leverage an Enterprise approach to the management of NOAA satellite programs. The reorganization will provide NESDIS with a more ef-

ficient, smarter, and timelier way of doing business. It will also provide a more cost-effective means of providing products and services to the Nation. Improvements include: more effective and proactive management of NOAA satellite programs; focused and coordinated management of functions that cross boundaries of NESDIS offices and centers; and, Enterprise-based, architecture-driven development and sustainment of NESDIS systems. The proposed PPA budget restructure will map more directly to the mission each organization executes. NOAA will fully engage our stakeholder community in this process. See the following chart for a detailed crosswalk of the budget line restructure.

### FY 2015 ORF BUDGET SUMMARY

NOAA requests a total of \$190,609,000 to support the Operations, Research, and Facilities of NESDIS, composed of a net increase of \$256,000 from the FY 2015 base.

#### NESDIS – ORF Program Change Highlights for FY 2015:

Program changes above \$500,000 are highlighted below. A summary of funding by PPA is located in Appendix 3. Detailed descriptions of all program changes by PPA are located in the NOAA FY 2015 Congressional Justification.

**Environmental Satellite Observing Systems  
\$121,542,000**

NOAA requests a total of \$121,542,000 in the Environmental Satellite Observing Systems sub-program. There are no program changes in this sub-program.

### ORF Budget PPA Changes

CURRENT	PROPOSED
<ul style="list-style-type: none"> <li>Satellite Command and Control</li> <li>Product Processing and Distribution</li> <li>NSOF Operations</li> </ul>	<ul style="list-style-type: none"> <li>Office of Satellite and Product Operations (OSPO)</li> <li>NSOF Operations</li> </ul>
<ul style="list-style-type: none"> <li>Product Development, Readiness and Application (PDRA)</li> <li>PDRA (Ocean Remote Sensing)</li> <li>Joint Center for Satellite Data Assimilation</li> </ul>	<ul style="list-style-type: none"> <li>Product Development, Readiness and Application (PDRA)</li> </ul>
<ul style="list-style-type: none"> <li>Archive, Access and Assessment</li> <li>Coastal Data Development</li> <li>Regional Climate Services</li> <li>Environmental Data Systems Modernization</li> </ul>	<ul style="list-style-type: none"> <li>National Environmental Information Office (NEIO)</li> </ul>

## PAC Budget PPA Changes

CURRENT	PROPOSED
<ul style="list-style-type: none"> <li>• GOES-N</li> <li>• GOES-R</li> <li>• POES</li> <li>• Jason-3</li> <li>• JPSS</li> <li>• Solar Irradiance Data and Rescue (SIDAR)</li> <li>• DSCOVR</li> <li>• COSMIC2/GNSS RO</li> <li>• EOS</li> <li>• CIP</li> <li>• CLASS</li> <li>• NDE</li> <li>• Enterprise Ground System</li> </ul>	<ul style="list-style-type: none"> <li>• GOES-R*</li> <li>• Jason-3</li> <li>• JPSS*</li> <li>• SIDAR</li> <li>• DSCOVR</li> <li>• COSMIC2/GNSS RO</li> <li>• Projects, Planning and Analysis</li> <li>• Satellite Ground Services (SGS)</li> <li>• System Architecture and Advanced Planning (SAAP)</li> </ul>

Note: The restructure includes changes for GOES-R that include moving funding to the Project, Planning and Analysis, SGS and SAAP offices. The proposal also moves JPSS funding to the SGS and SAAP offices.

### National Environmental Information Office \$69,067,000

NOAA requests an increase of \$2,000,000 in the National Environmental Information Office sub-program for a total of \$69,067,000. Highlights include:

**National Environmental Information Office: Big Earth Data Initiative:** NOAA requests an increase of \$2,000,000 to improve the accessibility and interoperability of its high-value environmental climate-related observations in concert with other federal agencies. The Big Earth Data Initiative in the FY 2015 President’s Budget request would standardize and optimize the management of data from federal Earth observations systems across numerous Federal agencies to collect information about the Earth from satellite, airborne, terrestrial, and ocean-based systems. NOAA’s participation in the Big Earth Data Initiative will focus on four specific objectives including: data discoverability, data access, data compatibility, and data documentation.

### FY 2015 PAC Budget Summary

NOAA requests a total of \$2,057,317,000 to support the Procurement, Acquisitions, and Construction (PAC) activities of NESDIS, composed of a net increase of \$161,653,000 from the FY 2015 base.

### NESDIS — PAC Program Change Highlights for FY 2015:

Program changes above \$500,000 are highlighted below.

A summary of funding by PPA is located in Appendix 3. Detailed descriptions of all program changes by PPA are located in the NOAA FY 2015 Congressional Justification.

### Systems Acquisition \$2,056,453,000

NOAA requests an increase of \$161,715,000 in the Systems Acquisition sub-program for a total of \$2,056,453,000. Highlights include:

**GOES-R:** NOAA requests an increase of \$38,939,000 to continue satellite engineering development and production activities for the GOES-R Series Program, meeting a launch readiness date (LRD) of Q2 FY 2016 for the first satellite of the series. This increase will continue

GOES-R** (Budget Authority in Thousands)*	
FY 2015 REQUEST	\$980,838
FY 2016	\$886,791
FY 2017	\$783,389
FY 2018	\$523,049
FY 2019	\$349,032

\*Outyears are estimates only. Future requests will be determined through the annual budget process.

\*\*The GOES-R lifecycle cost has been adjusted to account for the transfer of a total of \$181M through 2036 from the GOES-R program to the new PAC offices (SGS, SAAP, and PPA) under the PPA restructure in FY 2015.

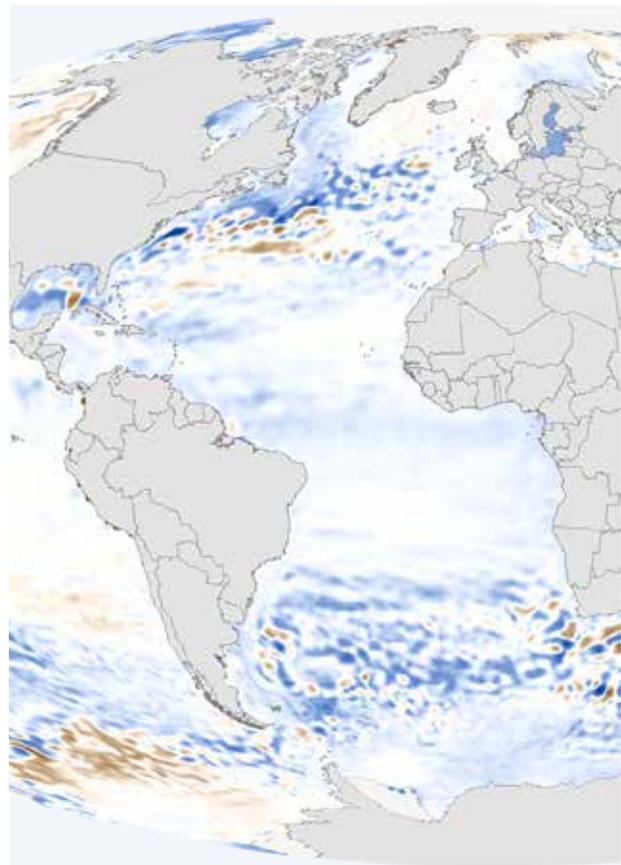


The Suomi NPP satellite captured this image of the Colby wildfire on January 16, 2014.

GOES-S development as well to meet a Q3 FY 2017 LRD. The GOES-R Series will provide continuity of geostationary data coverage after the GOES-N series and will deliver critical weather observations for severe weather events, such as hurricanes. The request will continue spacecraft and ground system development, integration, testing, and delivery of initial flight units for five instruments, and will support ground system integration and test activities for this four-satellite program (i.e., GOES R, S, T and U).

**Jason-3:** NOAA requests an increase of \$7,156,000 to develop and initiate a re-plan to launch Jason-3. NOAA’s European Partners, the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) and Centre National d’Etudes Spatiales (CNES), have indicated that if Jason-3 is not launched by Q2 FY 2015, they will be forced to cancel the program.

**Joint Polar Satellite System (JPSS):** NOAA requests an increase of \$95,412,000 to continue satellite engineering development and production activities for the JPSS Program and to enable JPSS to pursue the procurement



This image shows the average sea surface height data from 2012. Areas colored blue are higher than normal (base period 1993-2012); areas colored brown are lower than normal. Using data from the Jason-2 satellite and other altimetry missions, this dataset is an integral component of global estimates of sea level rise.

Jason-3 (Budget Authority in Thousands)	
FY 2015 REQUEST	\$25,656
FY 2016	TBD
FY 2017	TBD
FY 2018	TBD
FY 2019	TBD

of ATMS and CrIS spares to reduce schedule risk. The FY 2015 request supports: sustained operations of the Suomi National Polar-orbiting Partnership (Suomi-NPP) satellite, which was launched October 28, 2011; the planned launches of JPSS-1 (by no later than Q2 of FY 2017) and JPSS-2 (by the Q1 of FY 2022); enhanced robustness to the JPSS flight segment; and continued re-development of the common ground system for the JPSS missions (S-NPP, JPSS-1, and JPSS-2). These efforts sustain the critical polar weather satellite observations in the U.S. afternoon orbit that provide time critical, worldwide weather coverage from low Earth orbit. This increase does not change the JPSS life-cycle cost. In addition, with this request, NOAA will conduct studies and procure the instruments and spacecraft necessary to ensure continuity of polar-orbiting space-based observations to support weather forecasting. NOAA will also continue to support JPSS-1 and its instruments and will support the build of JPSS-2 instruments and the spacecraft, and the associated ground system.

JPSS** (Budget Authority in Thousands)*	
FY 2015 REQUEST	\$916,267
FY 2016	\$833,966
FY 2017	\$797,246
FY 2018	\$710,777
FY 2019	\$566,717

\*Outyears are estimates only. Future requests will be determined through the annual budget process.

\*\*The JPSS lifecycle cost has been adjusted to account for the transfer of a total of \$25.6M through 2025 from the JPSS program to the new PAC offices (SGS and SAAP) under the PPA restructure in FY 2015.

**Solar Irradiance, Data and Rescue (SIDAR):** NOAA requests an increase of \$15,000,000 to implement the acquisition strategy for hosting the Total Solar Irradiance Sensor (TSIS) instrument. TSIS will provide measurements of the variability in the Sun's total output as a continuation of the long term data that has been collected by the NASA SORCE mission. As part of the Solar Irradiance, Data and Rescue project, NOAA will also continue to support two international partnerships: satellite search and rescue, and environmental data collection and relay with the French Space Agency (CNES) and the Canadian Department of National Defense (DND). This program was formerly known as the Polar Free Flyer.

SIDAR (Budget Authority in Thousands)	
FY 2015 REQUEST	\$15,000
FY 2016	TBD
FY 2017	TBD
FY 2018	TBD
FY 2019	TBD

**Deep Space Climate Observatory (DSCOVR):** NOAA requests a decrease of \$2,575,000 to complete refurbishment of the DSCOVR satellite and sensors for solar wind observations, and to deliver the spacecraft for a United States Air Force (USAF) launch. The NWS Space Weather Prediction Center forecasters use information derived from NASA's Advanced Composition Explorer (ACE) satellite to issue forecasts and warnings for geomagnetic storms. NOAA provides these warnings to allow key industries such as the commercial airline, electric power, and GPS industries to prepare for and avoid the harmful effects of space weather. Once launched, DSCOVR will provide the same kinds of measurements that ACE currently provides. FY 2015 funds are necessary to complete the development of the data processing and archive systems, ship the satellite to its launch site, process its payload, and begin satellite operations and data processing operations after the U.S. Air Force launch.

DSCOVR (Budget Authority in Thousands)*	
FY 2015 REQUEST	\$21,100
FY 2016	\$3,200
FY 2017	\$2,400
FY 2018	\$2,069
FY 2019	\$0

\*Outyears are estimates only. Future requests will be determined through the annual budget process.

**COSMIC 2/Global Navigation Satellite System Radio Occultation (GNSS RO):** NOAA requests an increase of \$4,800,000 for ground reception and processing of GNSS RO satellite data provided by Taiwan and the U.S. Air Force. GNSS RO is a cost effective means of obtaining global atmospheric temperature profiles. This data is currently used to determine high accuracy atmospheric temperatures at various altitudes that improve weather forecasts. This environmental data is not available globally from other sources and losing



GNSS RO (Budget Authority in Thousands)*	
FY 2015 REQUEST	\$6,800
FY 2016	\$10,100
FY 2017	\$8,100
FY 2018	\$8,100
FY 2019	\$8,100

\*Outyears are estimates only. Future requests will be determined through the annual budget process.

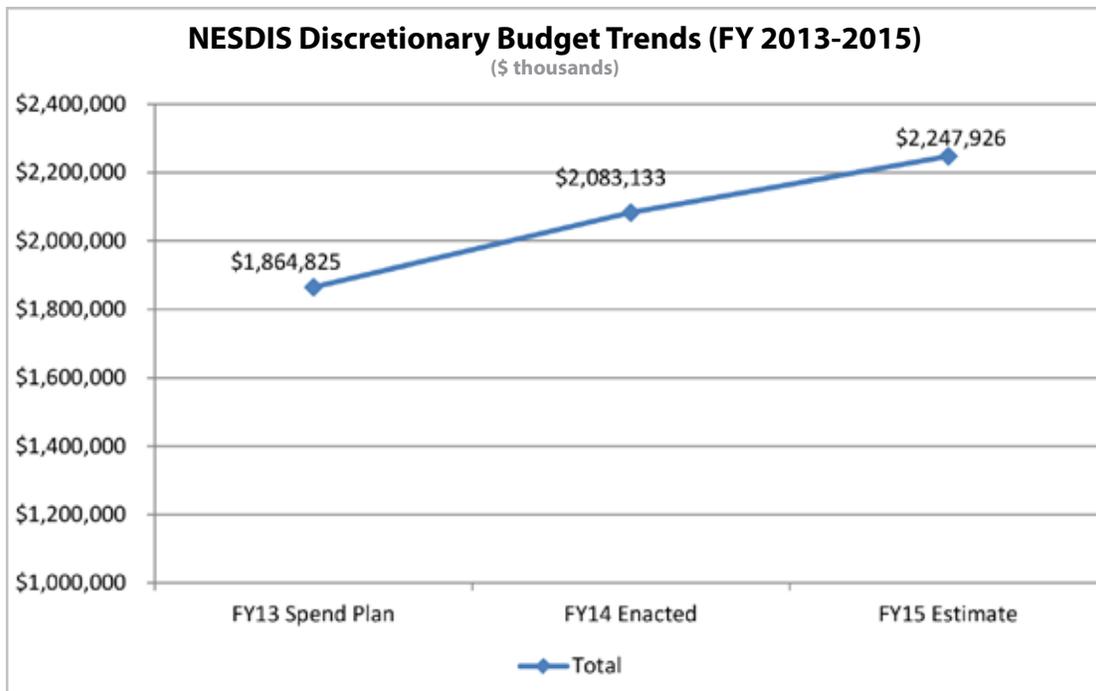
Enterprise Ground System* (Budget Authority in Thousands)*	
FY 2015 REQUEST	\$5,983
FY 2016	TBD
FY 2017	TBD
FY 2018	TBD
FY 2019	TBD

\*FY 2015 represents the second year for this program. Outyear funding is still to be determined.

this capability will result in a significant degradation of performance of the NOAA Numerical Weather Models. In addition, GNSS RO data provides unique advantages that can be leveraged to improve what NOAA does now with other sensors. This investment would advance the overall impact on operational weather models and makes GNSS RO a calibration anchor for the total observing system. The GNSS RO ground system is part of an international partnership between Taiwan’s National Space Organization (NSPO), USAF, and Brazil for a Constellation Observing System for Meteorology, Ionosphere, and Climate (COSMIC) follow-on. In addition, NOAA will continue to support the reception and processing of COSMIC and foreign satellite radio occultation data and build in the capability to ingest available commercial sources of data.

**Satellite Ground Services: Enterprise Ground System:** NOAA requests an increase of \$2,983,000 to enhance its capability to acquire, process, and disseminate environ-

mental data from satellites across the globe across an extensive spatial range (e.g., global, regional and local) within a variety of time scales (e.g., minutes to days) to central processing centers and distributed direct users. This increase will further enable the transition within NESDIS into a consolidated common ground enterprise architecture. This initiative directly links to key findings and recommendations of the 2012 Satellite Enterprise Independent Review Team, namely: establishing a core competency of system engineering, implementing engineering standards and configuration control, and establishing integrated management of the ground enterprise. By doing so, NESDIS will be able to more effectively and efficiently manage satellite throughput across its infrastructure. The NESDIS Enterprise Ground System program will transition the legacy satellite programs and begin to transition the next generation of polar and geostationary satellite programs into the common ground services without interrupting service to NOAA’s operational centers and other external users.



# Chapter 7

## Program Support



The view from NOAA's Daniel K. Inouye Regional Center (IRC), which opened in December 2013 and is located on Ford Island in Honolulu, Hawai'i.



**N**OAA's Program Support services are the backbone of NOAA's programs and mission. These offices – including Corporate Services, Office of Education, Facilities, and Office of Marine and Aviation Operations (OMAO) – provide the planning, administrative, financial, procurement, information technology, human resources, acquisitions and grants, and infrastructure services that are essential to safe, timely, and effective execution of the NOAA mission. NOAA Corporate Services provides centralized executive management, as well as policy formulation and direction, to all of NOAA's Staff and Line Offices. NOAA's Office of Education (OEd) provides advice and counsel to the Under Secretary of Commerce for Oceans and Atmosphere in matters pertaining to education. The NOAA Facility Program is the focal point for facility planning, project planning formulation and development, and project management oversight to support critical NOAA mission requirements. NOAA's Office of Marine and Aviation Operations (OMAO) supports an array of specialized ships and aircraft that play a critical role in the in-situ collection of oceanographic, atmospheric, hydrographic, and fisheries data in support of NOAA's environmental and scientific missions. OMAO also administers the NOAA-wide Diving Program and Small Boat Program and is composed of civilians and the NOAA Commissioned Corps (NOAA Corps) uniformed officers.

FY 2015 Request \$517,967,000

In FY 2015, NOAA requests a total of \$517,967,000 to position NOAA's Program Support for more effective execution of NOAA's diverse mission. This total includes Operations, Research, and Facilities (ORF) and Procurement, Acquisition, and Construction (PAC) accounts, and is composed of a net increase of \$5,635,000 from the FY 2015 base. The FY 2015 request supports critical investments in NOAA's Corporate Services and Fleet. In recent years, NOAA's Program Support has been unable to adequately support program offices. Similarly, the NOAA Fleet has been unable to fund and carry out sufficient days at sea (DAS) to successfully support NOAA's mission. NOAA's FY 2015 request seeks to strengthen NOAA Corporate Services by integrating new Departmental business systems at NOAA and mitigating risk of non-compliance with federal regulations. In addition, NOAA's FY 2015 request seeks to increase its at-sea data collection capability.

## FY 2015 ORF BUDGET SUMMARY

NOAA requests a total of \$480,562,000 to support the Operations, Research, and Facilities of the Program Support functions. This includes a net increase of \$3,635,000 from the FY 2015 base.



### PS – ORF Program Change Highlights for FY 2015:

Program changes above \$500,000 are highlighted below. A summary of funding by Program, Project, and Activity (PPA) is located in Appendix 3. Detailed descriptions of all program changes by PPA are located in the NOAA FY 2015 Congressional Justification.

Corporate Services \$232,530,000

NOAA requests an increase of \$12,000,000 for a total of \$232,530,000 under the Corporate Services sub-program. Highlights include:

**NOAA Wide Corporate Services and Agency Management Base: Building Capacity to Provide NOAA-Wide Corporate Services:** NOAA requests an increase of \$12,000,000 to strengthen agency support functions and mitigate the risk of non-compliance with the regulatory areas for which the Corporate Services units have agency oversight. This increase will allow NOAA to hire staff necessary to execute required activities effectively and will allow NOAA to hire contractors to support the integration of new systems.

NOAA Education Program \$16,400,000

NOAA requests a decrease of \$10,800,000 for a total of \$16,400,000 under the NOAA Education Program sub-program. Highlights include:

**NOAA Bay-Watershed Education and Training (B-WET) Regional Programs:** NOAA requests a decrease of \$7,200,000 for B-WET. In FY 2015, NOAA will continue to provide watershed educational experience for students through other programs, including National Marine Sanctuaries and National Estuarine Research Reserves.



NOAA's King Air is equipped with the latest aircraft technology. It has two large, downward-facing sensor ports that can support a wide variety of remote sensing systems. This aircraft assists the mission of the National Geodetic Survey and conducts aerial surveys to assist decision makers in emergency response.

**Office of Education:** NOAA requests a net decrease of \$3,600,000 to the Office of Education, including: a decrease of \$3,600,000 to terminate NOAA's Competitive Education Grant Program; a decrease of \$2,000,000 to reduce grants to NOAA's Educational Partnership Program for Minority Serving Institutions (EPP/MSI); and an increase of \$2,000,000 to develop and execute an efficient streamlined process to help lead STEM agencies, such as the National Science Foundation and Department of Education, translate NOAA expertise into materials and strategies to support former STEM education goals in the reorganization process that will also benefit EPP/MSI STEM outreach.

Facilities \$25,000,000

NOAA requests a total of \$25,000,000 in the Facilities sub-program. There are no program changes in this sub-program.

Marine Operations & Maintenance \$175,032,000

NOAA requests an increase of \$2,851,000 in the Marine Operations and Maintenance sub-program for a total of \$175,032,000. Highlights include:

**Marine Operations and Maintenance:** NOAA requests an increase of \$2,851,000 to support 3,170 OMAO funded days at sea (DAS) for fishery, hydrographic and marine ecosystems surveys. This funding provides a fleet utilization rate of 84 percent, assuming a fuel rate of \$3.80 per gallon.

Aviation Operations \$31,600,000

NOAA requests a net change of \$0 in the Aviation Operations sub-program for a total of \$31,600,000. Highlights include:

**Aircraft Services: Flight Hours:** NOAA requests an increase of \$1,000,000 to support 2,795 OMAO funded flight hours on NOAA's aircraft to conduct hurricane reconnaissance and research missions aimed at improving hurricane intensity forecasts. Flights also support water resource surveys that allow water managers and forecasters to more accurately forecast spring melts to meet industrial and agricultural needs.

**Aircraft Services: Study for Alternatives to WP-3D:** NOAA requests a decrease of \$1,000,000 for the one time funding to support a study for alternatives to the WP-3D platform for NOAA research.

## FY 2015 PAC Budget Summary

NOAA requests a total of \$7,200,000 to support the Procurement, Acquisition, and Construction (PAC) of the Program Support Functions. This includes an increase of \$2,000,000 from the FY 2015 base. Highlights include:

**Fleet Capital Improvements and Technology Infusion:** NOAA requests an increase of \$2,000,000 to support the Progressive Lifecycle Maintenance Program. Funds will improve the condition of the NOAA ship fleet by stabilizing capital investment in regular upgrades and replacements of mission support equipment and technology infusions such as data processing capacity.



Progressive Lifecycle Maintenance (Budget Authority in Thousands)*	
FY 2015 REQUEST	\$7,200
FY 2016	\$7,200
FY 2017	\$7,200
FY 2018	\$7,200
FY 2019	\$7,200

vides a measure of financial security after release from active duty for service members and their survivors. It is an important factor in the choice of a career in the uniformed services and is mandated by Federal statutes under Title 10, United States Code. NOAA transfers retirement pay funds to the Coast Guard, which handles the payment function for retirees and annuitants. Health care funds for non-Medicare-eligible retirees, dependents, and annuitants are transferred to the U.S. Public Health Service, which administers the health care program.

## Discretionary Funds

### Medicare-eligible Retiree Healthcare Fund Contribution

The FY 2003 Department of Defense Authorization Act requires all uniformed services, including NOAA, to participate in an accrual fund for Medicare-eligible retirees. Payments into this accrual fund will cover the future health care benefits of present, active-duty NOAA officers and their dependents and annuitants. In FY 2015, the Department of Defense proposes a consolidated TRICARE plan starting in 2016. This proposal would apply to the NOAA Commissioned Corps and has negligible budget impact on NOAA.

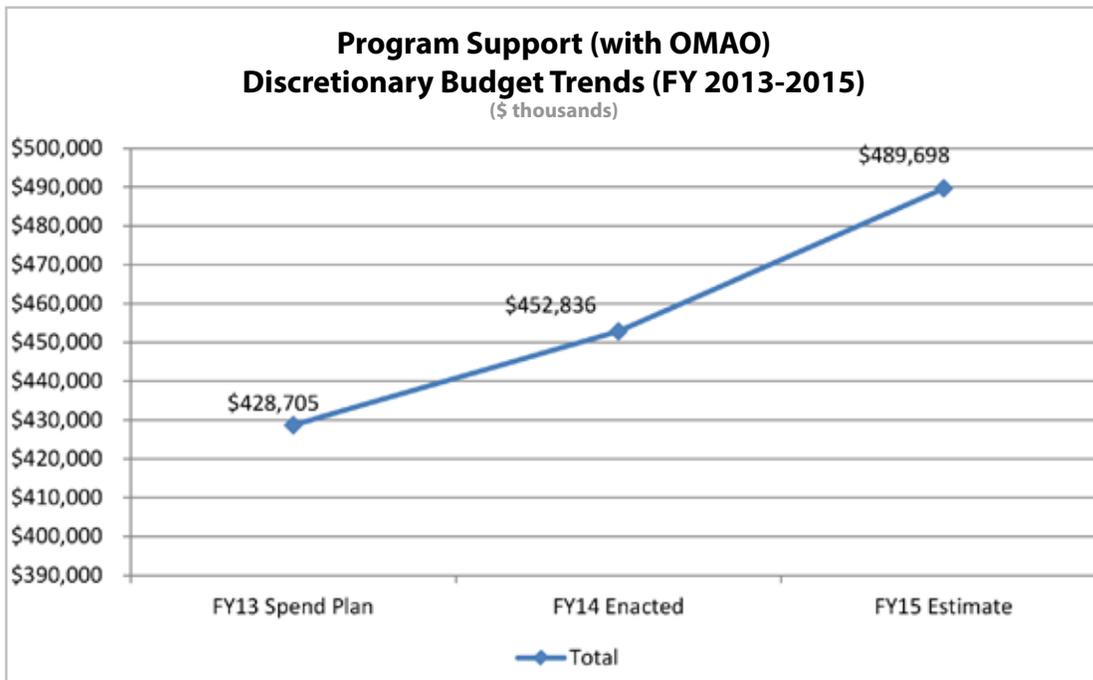
## Mandatory Funds

### NOAA Corps Commissioned Officers Retirement

The retirement system for the uniformed services pro-



NOAA Commissioned Corps Officers are an integral part of NOAA. Officers can be found operating one of NOAA's ships or aircraft to provide support to meet NOAA's missions.



Appendix 1

# NOAA FY 2015 Investments in the Administration's Opportunity, Growth and Security Initiative & the Climate Resilience Fund



NOAA Ship *Oscar Dyson* Dutch Harbor, Alaska.



In its FY 2015 budget, NOAA has investments in the Administration's Opportunity, Growth, and Security Initiative as well as in its Climate Resilience Fund. Both of these initiatives recognize that, through the Bipartisan Budget Act of 2013 (BBA), Congress came together to replace the damaging cuts caused by sequestration with longer-term reforms. While the President's Budget adheres to the BBA's discretionary funding levels for 2015, these levels are not sufficient to expand opportunity to all Americans, to drive the growth our economy needs, or to make needed investment in the research and products necessary to ensure community resilience in the wake of climate change impacts (e.g., severe drought, coastal storms). For that reason, the FY 2015 Budget also includes a \$56 billion, Opportunity, Growth, and Security Initiative that will help spur economic progress, promote opportunity, and strengthen national security. Moreover, the Opportunity, Growth, and Security Initiative is fully paid for with a balanced package of spending cuts and tax loophole closers, showing that additional pro-growth investments are easily affordable without increasing the deficit if Congress will enact common-sense spending and tax reforms.

For NOAA, the Opportunity, Growth, and Security Initiative will provide \$180 million for expanded weather, climate, and oceans observations and research. Specifically, it funds:

- Sustained observations and data gathering capabilities by constructing a NOAA ocean survey vessel;
- Improved understanding of drought impacts on industries, ecosystems, and human communities through the National Integrated Drought Information System (NIDIS) "Coping with Drought" initiative;
- Expanded products and services related to sea level rise and coastal inundation events;
- Studies on the impacts of changing ocean conditions on living marine resources; and
- Improved heat advisories and more confident projections for heat stress probabilities.

NOAA's FY 2015 proposal also includes critical investments in the Administration's proposed \$1 billion Climate Resilience Fund.

NOAA will use \$25M to increase oceanic and atmospheric research grants to further the understanding of climate change impacts on various sectors (e.g., fisheries) and to improve severe weather prediction models. More specifically, NOAA will use funds to: (1) maintain and improve global monitoring systems; (2) improve climate models and predictions so that scientists can

better anticipate the impacts of future climate variability and change; (3) develop informational products, diagnostics, and assessments of observed climate variability and change on global to regional scales; (4) and investigate how these changes impact both natural and developed communities to improve our understanding of resilience and adaptation options.

NOAA will use \$50M to help communities across the country apply lessons learned from Hurricane Sandy and other extreme weather events to be more prepared for the next extreme weather event and climate change. NOAA will provide competitive grants to state, local, and tribal governments and nonprofit organizations to implement projects that improve coastal resilience to severe weather events, climate hazards, and changing ocean conditions. Projects may include: (1) investments that integrate green infrastructure with grey, including coastal dunes, wetlands, or oyster restoration projects that mitigate flood impacts; and (2) other coastal hazard protection activities.



## Appendix 2

# Proposed Changes to General Provisions

NOAA seeks the following changes to the General Provisions in its FY 2015 budget submission. For a more detailed discussion of the justification for these proposed changes, please consult the FY 2015 Congressional Justification.

### 1. NOAA Cost Recovery Language

SEC. 108. *In order to carry out the responsibilities of the National Oceanic and Atmospheric Administration related to permitting and related regulatory activities, the Administrator of the National Oceanic and Atmospheric Administration is authorized, with their consent: (a) to enter into grants and cooperative agreements, contracts or other agreements with; (b) to use on a non-reimbursable basis land, services, equipment, personnel, and facilities made available by and (c) to receive and expend funds made available by, any Federal agency, State or subdivision thereof, local government, Tribal government, Territory or possession or any subdivision thereof, foreign government, international or intergovernmental organization, public or private organization, or individual: Provided, That funds received for permitting and related regulatory activities pursuant to this section shall be deposited as offsetting collections und the heading "National Oceanic and Atmospheric Administration– Operations, Research, and Facilities" and shall remain available until expended for such purposes.*

#### Justification

NOAA proposes to clarify its ability to receive and expend funds from, and to engage in agreements with, external entities to carry out its responsibilities related to permitting and other regulatory activities.

### 2. NOAA Working Capital Fund

SEC. 111. *There is hereby established in the National Oceanic and Atmospheric Administration a Working Capital Fund, which shall be available without fiscal year limitation, for expenses and equipment necessary for the performance of such services and projects that the Administrator of the National Oceanic and Atmospheric Administration determines may be performed more advantageously when centralized: Provided, That such central services shall, to the fullest extent practicable, be used to make unnecessary the maintenance of separate like services in the divisions and offices of the National Oceanic and Atmospheric Administration and the Department of Commerce: Provided further, That a separate schedule of expenditures and reimbursements, and a statement of the current assets and liabilities of the Working Capital Fund as of the close of the last completed fiscal year, shall be prepared each year: Provided further, That notwithstanding 31. U.S.C. 3302, the Working Capital Fund may be credited with advances and reimbursements from applicable appropriations of the divisions and offices for whom the services are provided: Provided further, That any inventories, equipment, and other assets pertaining to the services to be provided by such funds, either on hand or on order, less the related liabilities or unpaid obligations, and any appropriations made hereafter for the purpose of providing capital, shall be used to capitalize the Working Capital Fund: Provided further, That the Working Capital Fund shall provide for centralized services at rates which will return in full all expenses of operation, including depreciation or replacement of Fund plant, equipment, and automated data processing software and hardware systems, and an amount necessary to maintain a reasonable operating reserve as determined by the Administrator of the National Oceanic Atmospheric Administration and the Secretary of Commerce.*

#### Justification

NOAA proposes to establish a NOAA Working Capital Fund, which will finance, on a reimbursable basis, NOAA-wide information technology functions that are more efficiently and economically performed on a centralized basis.

### 3. Miller Act Waiver

SEC. 110. *The Secretary of Commerce may waive the requirement for bonds under 40 USC 3131 with respect to contracts for the construction, alteration, or repair of vessels, regardless of the terms of the contracts as to payment or title, when the contract is made under the Coast and Geodetic Survey Act of 1947, 33 U.S.C. § 883a et seq.*



Justification

NOAA proposes language that would waive the requirement for bonds in the Miller Act, 40 U.S.C. § 3131 et seq., to enable the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) to waive the performance and payment bond requirements of the Miller Act for the construction, alteration, or repair of ships in NOAA's fleet of research vessels.

# Appendix 3

## Control Table

<b>NATIONAL OCEAN SERVICE FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>Navigation, Observations and Positioning</b>						
Navigation, Observations and Positioning	121,463	136,000	1,876	137,876	0	137,876
Hydrographic Survey Priorities/Contracts	25,153	25,000	0	25,000	0	25,000
IOOS Regional Observations	26,551	28,500	0	28,500	1,000	29,500
<b>Total, Navigation, Observations and Positioning</b>	<b>173,167</b>	<b>189,500</b>	<b>1,876</b>	<b>191,376</b>	<b>1,000</b>	<b>192,376</b>
<b>Coastal Science and Assessment</b>						
Coastal Science, Assessment, Response and Restoration	62,450	70,500	1,003	71,503	1,500	73,003
Competitive Research	8,384	9,000	0	9,000	6,000	15,000
<b>Total, Coastal Science and Assessment</b>	<b>70,834</b>	<b>79,500</b>	<b>1,003</b>	<b>80,503</b>	<b>7,500</b>	<b>88,003</b>
<b>Ocean and Coastal Management and Services</b>						
Coastal Zone Management and Services	42,238	41,000	472	41,472	5,000	46,472
Coastal Management Grants	65,349	66,146	0	66,146	5,000	71,146
Coral Reef Program	24,944	26,000	78	26,078	0	26,078
National Estuarine Research Reserve System	20,496	21,300	0	21,300	0	21,300
Sanctuaries and Marine Protected Areas	45,649	48,500	639	49,139	(2,000)	47,139
<b>Total, Ocean and Coastal Management and Services</b>	<b>198,676</b>	<b>202,946</b>	<b>1,189</b>	<b>204,135</b>	<b>8,000</b>	<b>212,135</b>
<b>Undistributed ATBs</b>	<b>0</b>	<b>0</b>	<b>2,043</b>	<b>2,043</b>	<b>(2,043)</b>	<b>0</b>
<b>Total, National Ocean Service - ORF</b>	<b>442,677</b>	<b>471,946</b>	<b>6,111</b>	<b>478,057</b>	<b>14,457</b>	<b>492,514</b>
<b>Other National Ocean Service Accounts</b>						
Total, National Ocean Service - PAC	0	3,700	0	3,700	0	3,700
Total, National Ocean Service - Other	25,643	23,040	158	23,198	0	23,198
<b>GRAND TOTAL NOS</b>	<b>468,320</b>	<b>498,686</b>	<b>6,269</b>	<b>504,955</b>	<b>14,457</b>	<b>519,412</b>



<b>NATIONAL MARINE FISHERIES SERVICE FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>Protected Species Research and Management</b>						
Protected Species Research and Management Programs Base	37,615	39,000	680	39,680	0	39,680
Species Recovery Grants	4,022	5,000	9	5,009	5,000	10,009
Marine Mammals	46,257	49,000	717	49,717	(2,500)	47,217
Marine Turtles	12,006	12,200	188	12,388	(1,000)	11,388
Other Protected Species (Marine Fish, Plants, and Invertebrates)	6,557	7,000	116	7,116	4,000	11,116
Atlantic Salmon	4,658	5,000	74	5,074	1,000	6,074
Pacific Salmon (for Salmon Management Activities, see FRM)	54,406	59,500	1,227	60,727	0	60,727
<b>Total, Protected Species Research and Management</b>	<b>165,521</b>	<b>176,700</b>	<b>3,011</b>	<b>179,711</b>	<b>6,500</b>	<b>186,211</b>
<b>Fisheries Research and Management</b>						
Fisheries Research and Management Programs	170,470	175,000	2,833	177,833	4,000	181,833
National Catch Share Program	24,457	25,000	216	25,216	2,000	27,216
Expand Annual Stock Assessments - Improve Data Collection	63,950	69,000	745	69,745	2,500	72,245
Economics & Social Sciences Research	6,801	7,300	117	7,417	0	7,417
Salmon Management Activities	36,332	30,200	102	30,302	(3,000)	27,302
Regional Councils and Fisheries Commissions	29,397	32,000	738	32,738	0	32,738
Fisheries Statistics	21,614	22,000	361	22,361	0	22,361
Fish Information Networks	20,588	22,000	56	22,056	0	22,056
Survey and Monitoring Projects	22,671	24,000	404	24,404	0	24,404
Fisheries Oceanography	2,049	2,160	19	2,179	0	2,179
American Fisheries Act	3,541	3,700	82	3,782	0	3,782
Interjurisdictional Fisheries Grants	1,863	2,500	2	2,502	0	2,502
National Standard 8	948	1,000	9	1,009	0	1,009
Reducing Bycatch	3,205	3,500	8	3,508	0	3,508
Product Quality and Safety	6,138	6,700	146	6,846	0	6,846
<b>Total, Fisheries Research and Management</b>	<b>414,024</b>	<b>426,060</b>	<b>5,838</b>	<b>431,898</b>	<b>5,500</b>	<b>437,398</b>
<b>Enforcement &amp; Observers/Training</b>						
Enforcement	62,533	65,000	850	65,850	0	65,850
Observers/Training	40,214	43,000	478	43,478	0	43,478
<b>Total, Enforcement &amp; Observers/Training</b>	<b>102,747</b>	<b>108,000</b>	<b>1,328</b>	<b>109,328</b>	<b>0</b>	<b>109,328</b>
<b>Habitat Conservation &amp; Restoration</b>						

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<b>NATIONAL MARINE FISHERIES SERVICE FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
Sustainable Habitat Management	19,563	21,000	313	21,313	0	21,313
Fisheries Habitat Restoration	19,285	20,700	177	20,877	0	20,877
<b>Subtotal, Habitat Conservation &amp; Restoration</b>	<b>38,848</b>	<b>41,700</b>	<b>490</b>	<b>42,190</b>	<b>0</b>	<b>42,190</b>
<b>Other Activities Supporting Fisheries</b>						
Antarctic Research	2,609	2,900	42	2,942	0	2,942
Aquaculture	5,293	5,600	80	5,680	0	5,680
Climate Regimes & Ecosystem Productivity	1,683	2,000	31	2,031	848	2,879
Computer Hardware and Software - FY 2004 Omnibus Funded in PAC	1,717	1,800	5	1,805	0	1,805
Cooperative Research	11,179	12,000	80	12,080	0	12,080
Information Analyses & Dissemination	14,254	15,000	314	15,314	0	15,314
Marine Resources Monitoring, Assessment & Prediction Program (MarMap)	745	800	1	801	0	801
National Environmental Policy Act (NEPA)	6,056	6,500	109	6,609	0	6,609
NMFS Facilities Maintenance	3,075	3,300	2	3,302	0	3,302
Regional Studies	9,502	10,200	86	10,286	0	10,286
<b>Total, Other Activities Supporting Fisheries</b>	<b>56,113</b>	<b>60,100</b>	<b>750</b>	<b>60,850</b>	<b>848</b>	<b>61,698</b>
<b>Undistributed ATBs</b>	<b>0</b>	<b>0</b>	<b>2,381</b>	<b>2,381</b>	<b>(2,381)</b>	<b>0</b>
<b>Total, National Marine Fisheries Service - ORF</b>	<b>777,253</b>	<b>812,560</b>	<b>13,798</b>	<b>826,358</b>	<b>10,467</b>	<b>836,825</b>
<b>Other National Marine Fisheries Service Accounts</b>						
National Marine Fisheries Service - PAC	0	0	0	0	0	0
Total, National Marine Fisheries Service - Other	105,239	186,492	(16,566)	169,926	(90,000)	79,926
<b>GRAND TOTAL NMFS</b>	<b>882,492</b>	<b>999,052</b>	<b>(2,768)</b>	<b>996,284</b>	<b>(79,533)</b>	<b>916,751</b>



<b>OFFICE of OCEANIC AND ATMOSPHERIC RESEARCH FY 2015 PROPOSED OPERATING PLAN ( \$ in Thousands )</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>Climate Research</b>						
<b>Laboratories &amp; Cooperative Institutes</b>						
Laboratories & Cooperative Institutes	49,703	59,450	504	59,954	15,500	75,454
<b>Subtotal, Laboratories &amp; Cooperative Institutes</b>	<b>49,703</b>	<b>59,450</b>	<b>504</b>	<b>59,954</b>	<b>15,500</b>	<b>75,454</b>
<b>Regional Climate Data &amp; Information</b>						
Regional Climate Data & Information	40,415	37,000	312	37,312	15,000	52,312
<b>Subtotal, Climate Data &amp; Information</b>	<b>40,415</b>	<b>37,000</b>	<b>312</b>	<b>37,312</b>	<b>15,000</b>	<b>52,312</b>
<b>Climate Competitive Research</b>						
Climate Competitive Research	45,468	60,000	504	60,504	0	60,504
<b>Subtotal, Climate Competitive Research, Sustained Obs and Regional Info</b>	<b>45,468</b>	<b>60,000</b>	<b>504</b>	<b>60,504</b>	<b>0</b>	<b>60,504</b>
<b>Total, Climate Research</b>	<b>135,586</b>	<b>156,450</b>	<b>1,320</b>	<b>157,770</b>	<b>30,500</b>	<b>188,270</b>
<b>Weather &amp; Air Chemistry Research</b>						
<b>Laboratories &amp; Cooperative Institutes</b>						
Laboratories & Cooperative Institutes	51,229	64,000	547	64,547	0	64,547
<b>Subtotal, Laboratories &amp; Cooperative Institutes</b>	<b>51,229</b>	<b>64,000</b>	<b>547</b>	<b>64,547</b>	<b>0</b>	<b>64,547</b>
<b>Weather &amp; Air Chemistry Research Programs</b>						
U.S. Weather Research Program (USWRP)	3,934	4,200	36	4,236	3,000	7,236
Tornado Severe Storm Research / Phased Array Radar	9,324	13,000	111	13,111	0	13,111
<b>Subtotal, Weather &amp; Air Chemistry Research Programs</b>	<b>13,258</b>	<b>17,200</b>	<b>147</b>	<b>17,347</b>	<b>3,000</b>	<b>20,347</b>
<b>Total, Weather &amp; Air Chemistry Research</b>	<b>64,487</b>	<b>81,200</b>	<b>694</b>	<b>81,894</b>	<b>3,000</b>	<b>84,894</b>
<b>Ocean, Coastal, and Great Lakes Research</b>						
<b>Laboratories &amp; Cooperative Institutes</b>						
Laboratories & Cooperative Institutes	23,756	26,442	227	26,669	(2,000)	24,669
<b>Subtotal, Laboratories &amp; Cooperative Institutes</b>	<b>23,756</b>	<b>26,442</b>	<b>227</b>	<b>26,669</b>	<b>(2,000)</b>	<b>24,669</b>
<b>National Sea Grant College Program</b>						
National Sea Grant College Program Base	57,574	62,800	569	63,369	(2,000)	61,369
Marine Aquaculture Program	0	4,500	0	4,500	(2,500)	2,000

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<b>OFFICE of OCEANIC AND ATMOSPHERIC RESEARCH FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
Subtotal, National Sea Grant College Program	57,574	67,300	569	67,869	(4,500)	63,369
<b>Ocean Exploration and Research</b>						
Ocean Exploration and Research	21,046	26,000	220	26,220	(7,000)	19,220
<b>Subtotal, Ocean Exploration and Research</b>	<b>21,046</b>	<b>26,000</b>	<b>220</b>	<b>26,220</b>	<b>(7,000)</b>	<b>19,220</b>
<b>Other Ecosystems Programs</b>						
Integrated Ocean Acidification	5,963	6,000	51	6,051	8,871	14,922
<b>Subtotal, Other Ecosystems Programs</b>	<b>5,963</b>	<b>6,000</b>	<b>51</b>	<b>6,051</b>	<b>8,871</b>	<b>14,922</b>
<b>Sustained Ocean Observations and Monitoring</b>						
Sustained Ocean Observations and Monitoring	40,750	41,000	347	41,347	0	41,347
<b>Subtotal, Sustained Observations and Monitoring</b>	<b>40,750</b>	<b>41,000</b>	<b>347</b>	<b>41,347</b>	<b>0</b>	<b>41,347</b>
<b>Total, Ocean, Coastal, &amp; Great Lakes Research</b>	<b>149,089</b>	<b>166,742</b>	<b>1,414</b>	<b>168,156</b>	<b>(4,629)</b>	<b>163,527</b>
<b>Innovative Research &amp; Technology</b>						
High Performance Computing Initiatives	10,575	12,000	103	12,103	0	12,103
<b>Total, Innovative Research &amp; Technology</b>	<b>10,575</b>	<b>12,000</b>	<b>103</b>	<b>12,103</b>	<b>0</b>	<b>12,103</b>
<b>Undistributed ATBs</b>	<b>0</b>	<b>0</b>	<b>78</b>	<b>78</b>	<b>(78)</b>	<b>0</b>
<b>Total, Office of Oceanic and Atmospheric Research - ORF</b>	<b>359,737</b>	<b>416,392</b>	<b>3,609</b>	<b>420,001</b>	<b>28,793</b>	<b>448,794</b>
<b>Other Office of Oceanic and Atmospheric Research Accounts</b>						
Total, Office of Ocean and Atmospheric Research - PAC	9,677	10,379	0	10,379	3,000	13,379
Total, Office of Oceanic and Atmospheric Research - Other	0	0	0	0	0	0
<b>GRAND TOTAL OAR</b>	<b>369,414</b>	<b>426,771</b>	<b>3,609</b>	<b>430,380</b>	<b>31,793</b>	<b>462,173</b>



<b>NATIONAL WEATHER SERVICE FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
Observations	196,899	205,342	1,435	206,777	(6,500)	200,277
Central Processing	82,326	100,225	292	100,517	(14,000)	86,517
Analyze, Forecast and Support	447,585	475,467	6,893	482,360	(6,000)	476,360
Dissemination	44,092	46,331	174	46,505	(6,406)	40,099
Science and Technology Integration	100,370	126,262	1,114	127,376	(3,776)	123,600
<b>Undistributed ATBs</b>	<b>0</b>	<b>0</b>	<b>8,770</b>	<b>8,770</b>	<b>(8,770)</b>	<b>0</b>
<b>Total, National Weather Service - ORF</b>	<b>871,272</b>	<b>953,627</b>	<b>18,678</b>	<b>972,305</b>	<b>(45,452)</b>	<b>926,853</b>
<b>Other National Weather Service Accounts</b>						
Total, National Weather Service - PAC	82,289	113,619	0	113,619	22,875	136,494
Total, National Weather Service - Other	0	0	0	0	0	0
<b>GRAND TOTAL NWS</b>	<b>953,561</b>	<b>1,067,246</b>	<b>18,678</b>	<b>1,085,924</b>	<b>(22,577)</b>	<b>1,063,347</b>

<b>NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE FY 2015 PROPOSED OPERATING PLAN</b> (\$ in Thousands)	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>Environmental Satellite Observing Systems</b>						
<b>Office of Satellite and Product Operations (OSPO)</b>						
Satellite and Product Operations	75,543	84,000	342	84,342	0	84,342
NSOF Operations	7,461	8,000	500	8,500	0	8,500
<b>Subtotal, Office of Satellite and Product Operations</b>	<b>83,004</b>	<b>92,000</b>	<b>842</b>	<b>92,842</b>	<b>0</b>	<b>92,842</b>
<b>Product Development, Readiness &amp; Application</b>						
Product Development, Readiness & Application	25,141	26,000	0	26,000	0	26,000
<b>Subtotal, Product Development, Readiness &amp; Application</b>	<b>25,141</b>	<b>26,000</b>	<b>0</b>	<b>26,000</b>	<b>0</b>	<b>26,000</b>
Commercial Remote Sensing Regulatory Affairs	1,043	1,000	200	1,200	0	1,200
Office of Space Commercialization	614	600	400	1,000	0	1,000
Group on Earth Observations (GEO)	471	500	0	500	0	500
<b>Total, Environmental Satellite Observing Systems</b>	<b>110,273</b>	<b>120,100</b>	<b>1,442</b>	<b>121,542</b>	<b>0</b>	<b>121,542</b>
<b>National Environmental Information Office</b>						
National Environmental Information Office	64,966	67,067	0	67,067	2,000	69,067
<b>Total, National Environmental Information Office</b>	<b>64,966</b>	<b>67,067</b>	<b>0</b>	<b>67,067</b>	<b>2,000</b>	<b>69,067</b>
<b>Undistributed ATBs</b>	<b>0</b>	<b>0</b>	<b>1,744</b>	<b>1,744</b>	<b>(1,744)</b>	<b>0</b>
<b>Total, NESDIS - ORF</b>	<b>175,239</b>	<b>187,167</b>	<b>3,186</b>	<b>190,353</b>	<b>256</b>	<b>190,609</b>
<b>Other NESDIS Accounts</b>						
Total, NESDIS - PAC	1,689,586	1,895,966	(302)	1,895,664	161,653	2,057,317
Total, NESDIS - Other	0	0	0	0	0	0
<b>GRAND TOTAL NESDIS</b>	<b>1,864,825</b>	<b>2,083,133</b>	<b>2,884</b>	<b>2,086,017</b>	<b>161,909</b>	<b>2,247,926</b>



<b>PROGRAM SUPPORT FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>Corporate Services</b>						
<b>Under Secretary and Associate Offices</b>						
Under Secretary and Associate Offices Base	26,210	27,000	0	27,000	0	27,000
<b>Subtotal, Under Secretary and Associate Offices</b>	<b>26,210</b>	<b>27,000</b>	<b>0</b>	<b>27,000</b>	<b>0</b>	<b>27,000</b>
<b>NOAA Wide Corporate Services &amp; Agency Management</b>						
NOAA Wide Corporate Services & Agency Management Base	109,324	111,000	2,139	113,139	12,000	125,139
DOC Accounting System	9,068	10,000	0	10,000	0	10,000
Payment to the DOC Working Capital Fund	32,606	38,000	24,091	62,091	0	62,091
<b>Subtotal, NOAA Wide Corporate Services &amp; Agency Mgmt</b>	<b>150,998</b>	<b>159,000</b>	<b>26,230</b>	<b>185,230</b>	<b>12,000</b>	<b>197,230</b>
<b>IT Security</b>						
IT Security	6,154	8,300	0	8,300	0	8,300
<b>Subtotal, IT Security</b>	<b>6,154</b>	<b>8,300</b>	<b>0</b>	<b>8,300</b>	<b>0</b>	<b>8,300</b>
<b>Total, Corporate Services</b>	<b>183,362</b>	<b>194,300</b>	<b>26,230</b>	<b>220,530</b>	<b>12,000</b>	<b>232,530</b>
<b>NOAA Education Program</b>						
BWET Regional Programs	6,707	7,200	0	7,200	(7,200)	0
Education Partnership Program/Minority Serving Institutions (EPP/MSI)	13,043	14,400	(14,400)	0	0	0
Office of Education	5,590	5,600	14,400	20,000	(3,600)	16,400
<b>Total, NOAA Education Program</b>	<b>25,340</b>	<b>27,200</b>	<b>0</b>	<b>27,200</b>	<b>(10,800)</b>	<b>16,400</b>
<b>Facilities</b>						
NOAA Facilities Management & Construction and Safety	22,825	23,000	2,000	25,000	0	25,000
<b>Subtotal, NOAA Facilities Management, Construction &amp; Maintenance</b>	<b>22,825</b>	<b>23,000</b>	<b>2,000</b>	<b>25,000</b>	<b>0</b>	<b>25,000</b>
<b>Total, Facilities</b>	<b>22,825</b>	<b>23,000</b>	<b>2,000</b>	<b>25,000</b>	<b>0</b>	<b>25,000</b>
<b>Undistributed ATBs</b>	<b>0</b>	<b>0</b>	<b>416</b>	<b>416</b>	<b>(416)</b>	<b>0</b>
<b>Total, Program Support - ORF</b>	<b>231,527</b>	<b>244,500</b>	<b>28,646</b>	<b>273,146</b>	<b>784</b>	<b>273,930</b>
<b>Total, Program Support - PAC</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

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<b>PROGRAM SUPPORT FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>Total, Program Support - ORF and PAC</b>	<b>231,527</b>	<b>244,500</b>	<b>28,646</b>	<b>273,146</b>	<b>784</b>	<b>273,930</b>
<b>Marine Operations &amp; Maintenance</b>						
Marine Operations & Maintenance	154,662	170,000	2,181	172,181	2,851	175,032
<b>Subtotal, Marine Operations &amp; Maintenance</b>	<b>154,662</b>	<b>170,000</b>	<b>2,181</b>	<b>172,181</b>	<b>2,851</b>	<b>175,032</b>
<b>Aviation Operations</b>						
Aircraft Services	28,173	31,200	400	31,600	0	31,600
<b>Subtotal, Aviation Operations</b>	<b>28,173</b>	<b>31,200</b>	<b>400</b>	<b>31,600</b>	<b>0</b>	<b>31,600</b>
<b>Undistributed ATBs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total, OMAO - ORF</b>	<b>182,835</b>	<b>201,200</b>	<b>2,581</b>	<b>203,781</b>	<b>2,851</b>	<b>206,632</b>
<b>Total, OMAO - PAC</b>	<b>12,544</b>	<b>5,200</b>	<b>0</b>	<b>5,200</b>	<b>2,000</b>	<b>7,200</b>
<b>Total, OMAO - Other</b>	<b>30,068</b>	<b>30,205</b>	<b>0</b>	<b>30,205</b>	<b>0</b>	<b>30,205</b>
<b>Total, OMAO - ORF, PAC and Other</b>	<b>225,447</b>	<b>236,605</b>	<b>2,581</b>	<b>239,186</b>	<b>4,851</b>	<b>244,037</b>
<b>Total, Program Support and OMAO - ORF</b>	<b>414,362</b>	<b>445,700</b>	<b>31,227</b>	<b>476,927</b>	<b>3,635</b>	<b>480,562</b>
<b>Other Program Support and OMAO Accounts</b>						
Total, Program Support - PAC	12,544	5,200	0	5,200	2,000	7,200
Total, Program Support - Other	30,068	30,205	0	30,205	0	30,205
<b>GRAND TOTAL PS</b>	<b>456,974</b>	<b>481,105</b>	<b>31,227</b>	<b>512,332</b>	<b>5,635</b>	<b>517,967</b>



<b>ORF SUMMARY LINE OFFICE DIRECT OBLIGATIONS FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
National Ocean Service	442,677	471,946	6,111	478,057	14,457	492,514
National Marine Fisheries Service	777,253	812,560	13,798	826,358	10,467	836,825
Office of Oceanic and Atmospheric Research	359,737	416,392	3,609	420,001	28,793	448,794
National Weather Service	871,272	953,627	18,678	972,305	(45,452)	926,853
National Environmental Satellite, Data and Information Service	175,239	187,167	3,186	190,353	256	190,609
Program Support	414,362	445,700	31,227	476,927	3,635	480,562
<b>SUBTOTAL LO DIRECT OBLIGATIONS</b>	<b>3,040,540</b>	<b>3,287,392</b>	<b>76,609</b>	<b>3,364,001</b>	<b>12,156</b>	<b>3,376,157</b>

<b>ORF ADJUSTMENTS FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>SUBTOTAL LO DIRECT OBLIGATIONS</b>	<b>3,040,540</b>	<b>3,287,392</b>	<b>76,609</b>	<b>3,364,001</b>	<b>12,156</b>	<b>3,376,157</b>
<b>FINANCING</b>						
De-Obligations	(16,236)	(15,000)	0	(15,000)	0	(15,000)
Unobligated Balance, EOY	0	0	0	0	0	0
Unobligated Balance, Expiring	0	0	0	0	0	0
Unobligated Balance Adj SOY (start of year)	0	0	0	0	0	0
<b>Total ORF Financing</b>	<b>(16,236)</b>	<b>(15,000)</b>	<b>0</b>	<b>(15,000)</b>	<b>0</b>	<b>(15,000)</b>
<b>SUBTOTAL BUDGET AUTHORITY</b>	<b>3,024,304</b>	<b>3,272,392</b>	<b>76,609</b>	<b>3,349,001</b>	<b>12,156</b>	<b>3,361,157</b>
<b>TRANSFERS</b>						
Transfer from PAC to ORF	(14,649)	0	0	0	0	0
Transfer from P&D to ORF	(119,064)	(115,000)	(8,164)	(123,164)	0	(123,164)
<b>Total ORF Transfers</b>	<b>(133,713)</b>	<b>(115,000)</b>	<b>(8,164)</b>	<b>(123,164)</b>	<b>0</b>	<b>(123,164)</b>



<b>PROCUREMENT, ACQUISITION, and CONSTRUCTION FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>NOS</b>						
<b>CELCP Acquisition</b>						
Coastal and Estuarine Land Conservation Program	0	0	0	0	0	0
<b>Subtotal, NOS Acquisition</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>NERRS Construction</b>						
National Estuarine Rsrch Reserve Construction (NERRS)	0	1,700	0	1,700	0	1,700
<b>Subtotal, NERRS Construction</b>	<b>0</b>	<b>1,700</b>	<b>0</b>	<b>1,700</b>	<b>0</b>	<b>1,700</b>
<b>Marine Sanctuaries Construction</b>						
Marine Sanctuaries Base	0	2,000	0	2,000	0	2,000
<b>Subtotal, Marine Sanctuary Construction</b>	<b>0</b>	<b>2,000</b>	<b>0</b>	<b>2,000</b>	<b>0</b>	<b>2,000</b>
<b>Subtotal, NOS Construction</b>	<b>0</b>	<b>3,700</b>	<b>0</b>	<b>3,700</b>	<b>0</b>	<b>3,700</b>
<b>Total, NOS - PAC</b>	<b>0</b>	<b>3,700</b>	<b>0</b>	<b>3,700</b>	<b>0</b>	<b>3,700</b>
<b>Total, NMFS - PAC</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>OAR</b>						
<b>Systems Acquisition</b>						
Research Supercomputing/ CCRI	9,677	10,379	0	10,379	3,000	13,379
<b>Subtotal, OAR Systems Acquisition</b>	<b>9,677</b>	<b>10,379</b>	<b>0</b>	<b>10,379</b>	<b>3,000</b>	<b>13,379</b>
<b>Total, OAR - PAC</b>	<b>9,677</b>	<b>10,379</b>	<b>0</b>	<b>10,379</b>	<b>3,000</b>	<b>13,379</b>
<b>NWS</b>						
<b>Systems Acquisition</b>						
Observations	10,302	5,649	0	5,649	7,665	13,314
Central Processing	54,785	65,761	0	65,761	(1,500)	64,261
Dissemination	12,847	34,209	0	34,209	11,000	45,209
<b>Subtotal, NWS Systems Acquisition</b>	<b>77,934</b>	<b>105,619</b>	<b>0</b>	<b>105,619</b>	<b>17,165</b>	<b>122,784</b>

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<b>PROCUREMENT, ACQUISITION, and CONSTRUCTION FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
Construction						
Facilities Construction and Major Repairs	4,355	8,000	0	8,000	5,710	13,710
<b>Subtotal, NWS Construction</b>	<b>4,355</b>	<b>8,000</b>	<b>0</b>	<b>8,000</b>	<b>5,710</b>	<b>13,710</b>
<b>Total, NWS - PAC</b>	<b>82,289</b>	<b>113,619</b>	<b>0</b>	<b>113,619</b>	<b>22,875</b>	<b>136,494</b>
<b>NESDIS</b>						
<b>Systems Acquisition</b>						
Geostationary Systems - R	734,862	941,899	0	941,899	38,939	980,838
Jason-3	30,000	18,500	0	18,500	7,156	25,656
Joint Polar Satellite System (JPSS)	818,069	820,855	0	820,855	95,412	916,267
Solar Irradiance, Data and Rescue (SIDAR)	0	0	0	0	15,000	15,000
DSCOVR	20,556	23,675	0	23,675	(2,575)	21,100
COSMIC 2/GNSS RO	0	2,000	0	2,000	4,800	6,800
Satellite Ground Services	42,640	49,734	0	49,734	2,983	52,717
System Architecture & Advanced Planning	4,587	4,587	0	4,587	0	4,587
Projects, Planning & Analysis	36,795	33,488	0	33,488	0	33,488
<b>Subtotal, NESDIS Systems Acquisition</b>	<b>1,687,509</b>	<b>1,894,738</b>	<b>0</b>	<b>1,894,738</b>	<b>161,715</b>	<b>2,056,453</b>
<b>Construction</b>						
Satellite CDA Facility	2,077	2,228	0	2,228	(62)	2,166
<b>Subtotal, NESDIS Construction</b>	<b>2,077</b>	<b>2,228</b>	<b>0</b>	<b>2,228</b>	<b>(62)</b>	<b>2,166</b>
<b>Transfer to OIG</b>	<b>0</b>	<b>(1,000)</b>	<b>(302)</b>	<b>(1,302)</b>	<b>0</b>	<b>(1,302)</b>
<b>Total, NESDIS - PAC</b>	<b>1,689,586</b>	<b>1,895,966</b>	<b>(302)</b>	<b>1,895,664</b>	<b>161,653</b>	<b>2,057,317</b>
<b>Total, Program Support - PAC</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>OMAO</b>						
<b>OMAO - Fleet Replacement</b>						
Fleet Capital Improvements & Tech Infusion (Vessel Equip & Tech Refresh)	943	5,200	0	5,200	2,000	7,200
New Vessel Construction	11,601	0	0	0	0	0
<b>Subtotal, OMAO Fleet Replacement</b>	<b>12,544</b>	<b>5,200</b>	<b>0</b>	<b>5,200</b>	<b>2,000</b>	<b>7,200</b>
<b>Total, OMAO - PAC</b>	<b>12,544</b>	<b>5,200</b>	<b>0</b>	<b>5,200</b>	<b>2,000</b>	<b>7,200</b>
<b>GRAND TOTAL PAC</b>	<b>1,794,096</b>	<b>2,028,864</b>	<b>(302)</b>	<b>2,028,562</b>	<b>189,528</b>	<b>2,218,090</b>



<b>PAC ADJUSTMENTS FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>SUBTOTAL DIRECT OBLIGATIONS</b>	<b>1,794,096</b>	<b>2,028,864</b>	<b>(302)</b>	<b>2,028,562</b>	<b>189,528</b>	<b>2,218,090</b>
<b>FINANCING</b>						
De-Obligations	(15,000)	(7,000)	(6,000)	(13,000)	0	(13,000)
Unobligated Balance Adj. SOY (start of year)	0	0	0	0	0	0
Unobligated Balance End of Year	0	0	0	0	0	0
<b>Total PAC Financing</b>	<b>(15,000)</b>	<b>(7,000)</b>	<b>(6,000)</b>	<b>(13,000)</b>	<b>0</b>	<b>(13,000)</b>
<b>SUBTOTAL BUDGET AUTHORITY</b>	<b>1,779,096</b>	<b>2,021,864</b>	<b>(6,302)</b>	<b>2,015,562</b>	<b>189,528</b>	<b>2,205,090</b>
<b>TRANSFERS/RESCISSIONS</b>						
Transfer from PAC to ORF	14,649	0	0	0	0	0
Transfer to OIG	1,000	1,000	302	1,302	0	1,302
<b>Total PAC Transfers/Rescissions</b>	<b>15,649</b>	<b>1,000</b>	<b>302</b>	<b>1,302</b>	<b>0</b>	<b>1,302</b>
<b>SUBTOTAL APPROPRIATION</b>	<b>1,794,745</b>	<b>2,022,864</b>	<b>(6,000)</b>	<b>2,016,864</b>	<b>189,528</b>	<b>2,206,392</b>

<b>OTHER ACCOUNTS (DISCRETIONARY) FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>NMFS</b>						
Fishermen's Contingency Fund Obligations	324	350	0	350	0	350
Fishermen's Contingency Fund Budget Authority	324	350	0	350	0	350
Fishermen's Contingency Fund Appropriations	324	350	0	350	0	350
Foreign Fishing Observer Fund Obligations	0	0	0	0	0	0
Foreign Fishing Observer Fund Budget Authority	0	0	0	0	0	0
Foreign Fishing Observer Fund Appropriation	0	0	0	0	0	0
Fisheries Finance Program Account Obligations	0	0	0	0	0	0
Fisheries Finance Program Account Budget Authority	0	0	0	0	0	0
Fisheries Finance Program Account Appropriation	0	0	0	0	0	0
Promote and Develop Fisheries Obligations	0	0	0	0	0	0
Promote and Develop Fisheries Budget Authority	(119,064)	(115,000)	(8,164)	(123,164)	0	(123,164)
Promote and Develop Fisheries Appropriation	0	0	0	0	0	0
Pacific Coastal Salmon Fund Obligations	60,382	65,000	0	65,000	(15,000)	50,000
Pacific Coastal Salmon Fund Budget Authority	60,382	65,000	0	65,000	(15,000)	50,000
Pacific Coastal Salmon Fund Appropriation	60,382	65,000	0	65,000	(15,000)	50,000
Marine Mammal Unusual Mortality Event Fund Obligations	0	0	0	0	0	0
Marine Mammal Unusual Mortality Event Fund Budget Authority	0	0	0	0	0	0
Marine Mammal Unusual Mortality Event Fund Appropriation	0	0	0	0	0	0
Fisheries Disaster Assistance Fund Obligations	0	75,000	0	75,000	(75,000)	0
Fisheries Disaster Assistance Fund Budget Authority	0	75,000	0	75,000	(75,000)	0
Fisheries Disaster Assistance Fund Appropriation	0	75,000	0	75,000	(75,000)	0
<b>Subtotal, NMFS Other Discretionary Direct Obligation</b>	<b>60,706</b>	<b>140,350</b>	<b>0</b>	<b>140,350</b>	<b>(90,000)</b>	<b>50,350</b>
<b>Subtotal, NMFS Other Discretionary Budget Authority</b>	<b>(58,358)</b>	<b>25,350</b>	<b>(8,164)</b>	<b>17,186</b>	<b>(90,000)</b>	<b>(72,814)</b>
<b>Subtotal, NMFS Other Discretionary Appropriation</b>	<b>60,706</b>	<b>140,350</b>	<b>0</b>	<b>140,350</b>	<b>(90,000)</b>	<b>50,350</b>
<b>OMAO</b>						
Medicare Eligible Retiree Healthcare Fund Acct Obligations	1,799	1,936	0	1,936	0	1,936
Medicare Eligible Retiree Healthcare Fund Acct Budget Authority	1,799	1,936	0	1,936	0	1,936

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<b>OTHER ACCOUNTS (DISCRETIONARY) FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
Medicare Eligible Retiree Healthcare Fund Acct Appropriations	1,799	1,936	0	1,936	0	1,936
<b>Subtotal, OMAO Other Discretionary Direct Obligations</b>	<b>1,799</b>	<b>1,936</b>	<b>0</b>	<b>1,936</b>	<b>0</b>	<b>1,936</b>
<b>Subtotal, OMAO Other Discretionary Budget Authority</b>	<b>1,799</b>	<b>1,936</b>	<b>0</b>	<b>1,936</b>	<b>0</b>	<b>1,936</b>
<b>Subtotal, OMAO Other Discretionary Appropriation</b>	<b>1,799</b>	<b>1,936</b>	<b>0</b>	<b>1,936</b>	<b>0</b>	<b>1,936</b>
<b>TOTAL, OTHER DISCRETIONARY DIRECT OBLIGATIONS</b>	<b>62,505</b>	<b>142,286</b>	<b>0</b>	<b>142,286</b>	<b>(90,000)</b>	<b>52,286</b>
<b>TOTAL, OTHER DISCRETIONARY BUDGET AUTHORITY</b>	<b>(56,559)</b>	<b>27,286</b>	<b>(8,164)</b>	<b>19,122</b>	<b>(90,000)</b>	<b>(70,878)</b>
<b>TOTAL, OTHER DISCRETIONARY APPROPRIATION</b>	<b>62,505</b>	<b>142,286</b>	<b>0</b>	<b>142,286</b>	<b>(90,000)</b>	<b>52,286</b>

<b>GRAND TOTAL SUMMARY Discretionary Appropriations FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
Operations, Research and Facilities	2,890,591	3,157,392	68,445	3,225,837	12,156	3,237,993
Procurement, Acquisition and Construction	1,794,745	2,022,864	(6,000)	2,016,864	189,528	2,206,392
Coastal Zone Management Fund	0	0	0	0	0	0
Fisherman's Contingency Fund	324	350	0	350	0	350
Foreign Fishing Observer Fund	0	0	0	0	0	0
Fisheries Financing Program Account	0	0	0	0	0	0
Pacific Coastal Salmon Fund	60,382	65,000	0	65,000	(15,000)	50,000
Fisheries Disaster Assistance Fund	0	75,000	0	75,000	(75,000)	0
Marine Mammal Unusual Mortality Event Fund	0	0	0	0	0	0
Medicare Eligible Retiree Health Care Fund	1,799	1,936	0	1,936	0	1,936
<b>GRAND TOTAL DISCRETIONARY APPROPRIATION</b>	<b>4,747,841</b>	<b>5,322,542</b>	<b>62,445</b>	<b>5,384,987</b>	<b>111,684</b>	<b>5,496,671</b>



<b>SUMMARY OF DISCRETIONARY RESOURCES FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>Discretionary Direct Obligations</b>						
ORF Direct Obligations	3,040,540	3,287,392	76,609	3,364,001	12,156	3,376,157
PAC Direct Obligations	1,794,096	2,028,864	(302)	2,028,562	189,528	2,218,090
OTHER Direct Obligations	62,505	142,286	0	142,286	(90,000)	52,286
<b>TOTAL Discretionary Direct Obligations</b>	<b>4,897,141</b>	<b>5,458,542</b>	<b>76,307</b>	<b>5,534,849</b>	<b>111,684</b>	<b>5,646,533</b>
<b>Discretionary Budget Authority</b>						
ORF Budget Authority	3,024,304	3,272,392	76,609	3,349,001	12,156	3,361,157
PAC Budget Authority	1,779,096	2,021,864	(6,302)	2,015,562	189,528	2,205,090
OTHER Budget Authority	(56,559)	27,286	(8,164)	19,122	(90,000)	(70,878)
<b>TOTAL Discretionary Budget Authority</b>	<b>4,746,841</b>	<b>5,321,542</b>	<b>62,143</b>	<b>5,383,685</b>	<b>111,684</b>	<b>5,495,369</b>
<b>Discretionary Appropriations</b>						
ORF Appropriations	2,890,591	3,157,392	68,445	3,225,837	12,156	3,237,993
PAC Appropriations	1,794,745	2,022,864	(6,000)	2,016,864	189,528	2,206,392
OTHER Appropriations	62,505	142,286	0	142,286	(90,000)	52,286
<b>TOTAL Discretionary Appropriation</b>	<b>4,747,841</b>	<b>5,322,542</b>	<b>62,445</b>	<b>5,384,987</b>	<b>111,684</b>	<b>5,496,671</b>

<b>OTHER ACCOUNTS (MANDATORY) FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>NOS</b>						
Damage Assessment & Restoration Revolving Fund Obligations	24,694	20,424	576	21,000	0	21,000
Damage Assessment & Restoration Revolving Fund Budget Authority	7,694	5,424	576	6,000	0	6,000
Damage Assessment & Restoration Revolving Fund Appropriation	0	0	0	0	0	0
Sanctuaries Enforcement Asset Forfeiture Fund Obligations	949	928	(808)	120	0	120
Sanctuaries Enforcement Asset Forfeiture Fund Budget Authority	949	928	(808)	120	0	120
Sanctuaries Enforcement Asset Forfeiture Fund Appropriation	949	1,000	(880)	120	0	120
Gulf Coast Ecosystem Restoration Fund Obligations	0	1,688	390	2,078	0	2,078
Gulf Coast Ecosystem Restoration Fund Budget Authority	0	1,688	390	2,078	0	2,078
Gulf Coast Ecosystem Restoration Fund Appropriation	0	1,819	259	2,078	0	2,078
<b>Subtotal, NOS Other Mandatory Direct Obligations</b>	<b>25,643</b>	<b>23,040</b>	<b>158</b>	<b>23,198</b>	<b>0</b>	<b>23,198</b>
<b>Subtotal, NOS Other Mandatory Budget Authority</b>	<b>8,643</b>	<b>8,040</b>	<b>158</b>	<b>8,198</b>	<b>0</b>	<b>8,198</b>
<b>Subtotal, NOS Other Mandatory Appropriation</b>	<b>949</b>	<b>2,819</b>	<b>(621)</b>	<b>2,198</b>	<b>0</b>	<b>2,198</b>
<b>NMFS</b>						
Promote and Develop Fisheries Obligations	11,172	5,774	2,434	8,208	0	8,208
Promote and Develop Fisheries Budget Authority	130,236	120,774	10,598	131,372	0	131,372
Promote and Develop Fisheries Appropriation	0	0	0	0	0	0
Fisheries Finance Program Account Obligations	9,827	14,629	(14,629)	0	0	0
Fisheries Finance Program Account Budget Authority	9,800	14,629	(14,629)	0	0	0
Fisheries Finance Program Account Appropriation	9,800	14,629	(14,629)	0	0	0
Federal Ship Financing Obligations	0	0	0	0	0	0
Federal Ship Financing Budget Authority	0	0	0	0	0	0
Federal Ship Financing Appropriation	0	0	0	0	0	0
Environmental Improve & Restoration Fund Obligations	9,680	9,087	(8,795)	292	0	292
Environmental Improve & Restoration Fund Budget Authority	11,022	9,087	(8,795)	292	0	292
Environmental Improve & Restoration Fund Appropriation	11,022	9,792	(9,500)	292	0	292
Limited Access System Administration Fund Obligations	8,897	8,998	2,857	11,855	0	11,855

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<b>OTHER ACCOUNTS (MANDATORY) FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
Limited Access System Administration Fund Budget Authority	14,098	8,998	1,860	10,858	0	10,858
Limited Access System Administration Fund Appropriation	14,098	9,718	1,140	10,858	0	10,858
Western Pacific Sustainable Fisheries Fund Obligations	949	160	861	1,021	0	1,021
Western Pacific Sustainable Fisheries Fund Budget Authority	949	160	90	250	0	250
Western Pacific Sustainable Fisheries Fund Appropriation	949	250	0	250	0	250
Fisheries Enforcement Asset Forfeiture Fund Obligations	4,008	3,640	360	4,000	0	4,000
Fisheries Enforcement Asset Forfeiture Fund Budget Authority	4,745	3,640	360	4,000	0	4,000
Fisheries Enforcement Asset Forfeiture Fund Appropriation	4,745	4,000	0	4,000	0	4,000
North Pacific Observer Fund Obligations	0	3,854	346	4,200	0	4,200
North Pacific Observer Fund Budget Authority	0	3,854	346	4,200	0	4,200
North Pacific Observer Fund Appropriation	0	4,200	0	4,200	0	4,200
<b>Subtotal, NMFS Other Mandatory Direct Obligations</b>	<b>44,533</b>	<b>46,142</b>	<b>(16,566)</b>	<b>29,576</b>	<b>0</b>	<b>29,576</b>
<b>Subtotal, NMFS Other Mandatory Budget Authority</b>	<b>170,850</b>	<b>161,142</b>	<b>(10,170)</b>	<b>150,972</b>	<b>0</b>	<b>150,972</b>
<b>Subtotal, NMFS Other Mandatory Appropriation</b>	<b>40,614</b>	<b>42,589</b>	<b>(22,989)</b>	<b>19,600</b>	<b>0</b>	<b>19,600</b>
<b>OMAO</b>						
NOAA Corp Commissioned Officers Retirement Obligations	28,269	28,269	0	28,269	0	28,269
NOAA Corp Commissioned Officers Retirement Budget Authority	28,269	28,269	0	28,269	0	28,269
NOAA Corp Commissioned Officers Retirement Budget Appropriation	28,269	28,269	0	28,269	0	28,269
<b>Subtotal, OMAO Other Mandatory Direct Obligations</b>	<b>28,269</b>	<b>28,269</b>	<b>0</b>	<b>28,269</b>	<b>0</b>	<b>28,269</b>
<b>Subtotal, OMAO Other Mandatory Budget Authority</b>	<b>28,269</b>	<b>28,269</b>	<b>0</b>	<b>28,269</b>	<b>0</b>	<b>28,269</b>
<b>Subtotal, OMAO Other Mandatory Appropriation</b>	<b>28,269</b>	<b>28,269</b>	<b>0</b>	<b>28,269</b>	<b>0</b>	<b>28,269</b>
<b>TOTAL, OTHER MANDATORY DIRECT OBLIGATIONS</b>	<b>98,445</b>	<b>97,451</b>	<b>(16,408)</b>	<b>81,043</b>	<b>0</b>	<b>81,043</b>
<b>TOTAL, OTHER MANDATORY BUDGET AUTHORITY</b>	<b>207,762</b>	<b>197,451</b>	<b>(10,012)</b>	<b>187,439</b>	<b>0</b>	<b>187,439</b>
<b>TOTAL, OTHER MANDATORY APPROPRIATION</b>	<b>69,832</b>	<b>73,677</b>	<b>(23,610)</b>	<b>50,067</b>	<b>0</b>	<b>50,067</b>

<b>NOAA SUMMARY FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
TOTAL Direct Obligations (Discretionary & Mandatory)	4,995,586	5,555,993	59,899	5,615,892	111,684	5,727,576
TOTAL Budget Authority (Discretionary & Mandatory)	4,954,603	5,518,993	52,131	5,571,124	111,684	5,682,808
TOTAL Appropriation (Discretionary & Mandatory)	4,817,673	5,396,219	38,835	5,435,054	111,684	5,546,738
Reimbursable Financing	242,000	242,000	0	242,000	0	242,000
<b>TOTAL OBLIGATIONS (Direct &amp; Reimbursable)</b>	<b>5,237,586</b>	<b>5,797,993</b>	<b>59,899</b>	<b>5,857,892</b>	<b>111,684</b>	<b>5,969,576</b>
Offsetting Receipts	(3,521)	(6,000)	2,555	(3,445)	0	(3,445)
<b>TOTAL OBLIGATIONS (Direct, Reimbursable &amp; Off- setting Receipts )</b>	<b>5,234,065</b>	<b>5,791,993</b>	<b>62,454</b>	<b>5,854,447</b>	<b>111,684</b>	<b>5,966,131</b>



<b>LINE OFFICE SUMMARY FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
<b>National Ocean Service</b>						
ORF	442,677	471,946	6,111	478,057	14,457	492,514
PAC	0	3,700	0	3,700	0	3,700
OTHER	25,643	23,040	158	23,198	0	23,198
<b>TOTAL, NOS</b>	<b>468,320</b>	<b>498,686</b>	<b>6,269</b>	<b>504,955</b>	<b>14,457</b>	<b>519,412</b>
<b>National Marine Fisheries Service</b>						
ORF	777,253	812,560	13,798	826,358	10,467	836,825
PAC	0	0	0	0	0	0
OTHER	105,239	186,492	(16,566)	169,926	(90,000)	79,926
<b>TOTAL, NMFS</b>	<b>882,492</b>	<b>999,052</b>	<b>(2,768)</b>	<b>996,284</b>	<b>(79,533)</b>	<b>916,751</b>
<b>Oceanic and Atmospheric Research</b>						
ORF	359,737	416,392	3,609	420,001	28,793	448,794
PAC	9,677	10,379	0	10,379	3,000	13,379
OTHER	0	0	0	0	0	0
<b>TOTAL, OAR</b>	<b>369,414</b>	<b>426,771</b>	<b>3,609</b>	<b>430,380</b>	<b>31,793</b>	<b>462,173</b>
<b>National Weather Service</b>						
ORF	871,272	953,627	18,678	972,305	(45,452)	926,853
PAC	82,289	113,619	0	113,619	22,875	136,494
OTHER	0	0	0	0	0	0
<b>TOTAL, NWS</b>	<b>953,561</b>	<b>1,067,246</b>	<b>18,678</b>	<b>1,085,924</b>	<b>(22,577)</b>	<b>1,063,347</b>
<b>National Environmental Satellite, Data and Information Service</b>						
ORF	175,239	187,167	3,186	190,353	256	190,609
PAC	1,689,586	1,895,966	(302)	1,895,664	161,653	2,057,317
OTHER	0	0	0	0	0	0
<b>TOTAL, NESDIS</b>	<b>1,864,825</b>	<b>2,083,133</b>	<b>2,884</b>	<b>2,086,017</b>	<b>161,909</b>	<b>2,247,926</b>
<b>Program Support / Corporate Services</b>						
ORF	183,362	194,300	26,230	220,530	12,000	232,530
PAC	0	0	0	0	0	0

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<b>LINE OFFICE SUMMARY FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
OTHER	0	0	0	0	0	0
<b>SUBTOTAL, PS / Corporate Services</b>	<b>183,362</b>	<b>194,300</b>	<b>26,230</b>	<b>220,530</b>	<b>12,000</b>	<b>232,530</b>
<b>Program Support / NOAA Education Program</b>						
ORF	25,340	27,200	0	27,200	(10,800)	16,400
PAC	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
<b>SUBTOTAL, PS / NOAA Education Program</b>	<b>25,340</b>	<b>27,200</b>	<b>0</b>	<b>27,200</b>	<b>(10,800)</b>	<b>16,400</b>
<b>Program Support / Facilities</b>						
ORF	22,825	23,000	2,000	25,000	0	25,000
PAC	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
<b>SUBTOTAL, PS / Facilities</b>	<b>22,825</b>	<b>23,000</b>	<b>2,000</b>	<b>25,000</b>	<b>0</b>	<b>25,000</b>
<b>Program Support / Corp Srv, Edu, Fac</b>						
ORF	231,527	244,500	28,646	273,146	784	273,930
PAC	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
<b>TOTAL, PS / Corp Srv, Edu, Fac</b>	<b>231,527</b>	<b>244,500</b>	<b>28,646</b>	<b>273,146</b>	<b>784</b>	<b>273,930</b>
<b>Program Support / Office of Marine and Aviation Operations</b>						
ORF	182,835	201,200	2,581	203,781	2,851	206,632
PAC	12,544	5,200	0	5,200	2,000	7,200
OTHER	30,068	30,205	0	30,205	0	30,205
<b>TOTAL, PS / OMAO</b>	<b>225,447</b>	<b>236,605</b>	<b>2,581</b>	<b>239,186</b>	<b>4,851</b>	<b>244,037</b>
Total PS ORF	414,362	445,700	31,227	476,927	3,635	480,562
Total PS PAC	12,544	5,200	0	5,200	2,000	7,200
Total PS Other	30,068	30,205	0	30,205	0	30,205
<b>TOTAL, PS</b>	<b>456,974</b>	<b>481,105</b>	<b>31,227</b>	<b>512,332</b>	<b>5,635</b>	<b>517,967</b>
<b>DIRECT OBLIGATIONS</b>						
ORF	3,040,540	3,287,392	76,609	3,364,001	12,156	3,376,157

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<b>LINE OFFICE SUMMARY FY 2015 PROPOSED OPERATING PLAN (\$ in Thousands)</b>	<b>FY 2013 Spend Plan</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Total ATBs</b>	<b>FY 2015 Base</b>	<b>FY 2015 Program Changes</b>	<b>FY 2015 Estimate</b>
PAC	1,794,096	2,028,864	(302)	2,028,562	189,528	2,218,090
OTHER	160,950	239,737	(16,408)	223,329	(90,000)	133,329
<b>TOTAL, DIRECT OBLIGATIONS</b>	<b>4,995,586</b>	<b>5,555,993</b>	<b>59,899</b>	<b>5,615,892</b>	<b>111,684</b>	<b>5,727,576</b>
<b>ORF Adjustments (Deobligations / Rescissions)</b>	<b>(16,236)</b>	<b>(15,000)</b>	<b>0</b>	<b>(15,000)</b>	<b>0</b>	<b>(15,000)</b>
<b>ORF Transfers</b>	<b>(133,713)</b>	<b>(115,000)</b>	<b>(8,164)</b>	<b>(123,164)</b>	<b>0</b>	<b>(123,164)</b>
<b>PAC Adjustments (Deobligations / Rescissions)</b>	<b>(15,000)</b>	<b>(7,000)</b>	<b>(6,000)</b>	<b>(13,000)</b>	<b>0</b>	<b>(13,000)</b>
<b>PAC Transfers</b>	<b>15,649</b>	<b>1,000</b>	<b>302</b>	<b>1,302</b>	<b>0</b>	<b>1,302</b>
<b>OTHER Discretionary Adjustments</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Mandatory Accounts Excluded</b>	<b>(98,445)</b>	<b>(97,451)</b>	<b>16,408</b>	<b>(81,043)</b>	<b>0</b>	<b>(81,043)</b>
<b>TOTAL, DISCRETIONARY APPROPRIATIONS</b>	<b>4,747,841</b>	<b>5,322,542</b>	<b>62,445</b>	<b>5,384,987</b>	<b>111,684</b>	<b>5,496,671</b>





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